

NORTH CAROLINA
RESOURCES AND INDUSTRIES

ISSUED BY
THE STATE OF NORTH CAROLINA
DEPARTMENT OF
CONSERVATION AND DEVELOPMENT

North Carolina Historical Commission
Office of the Secretary

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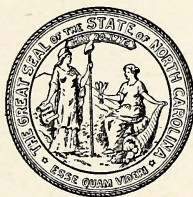


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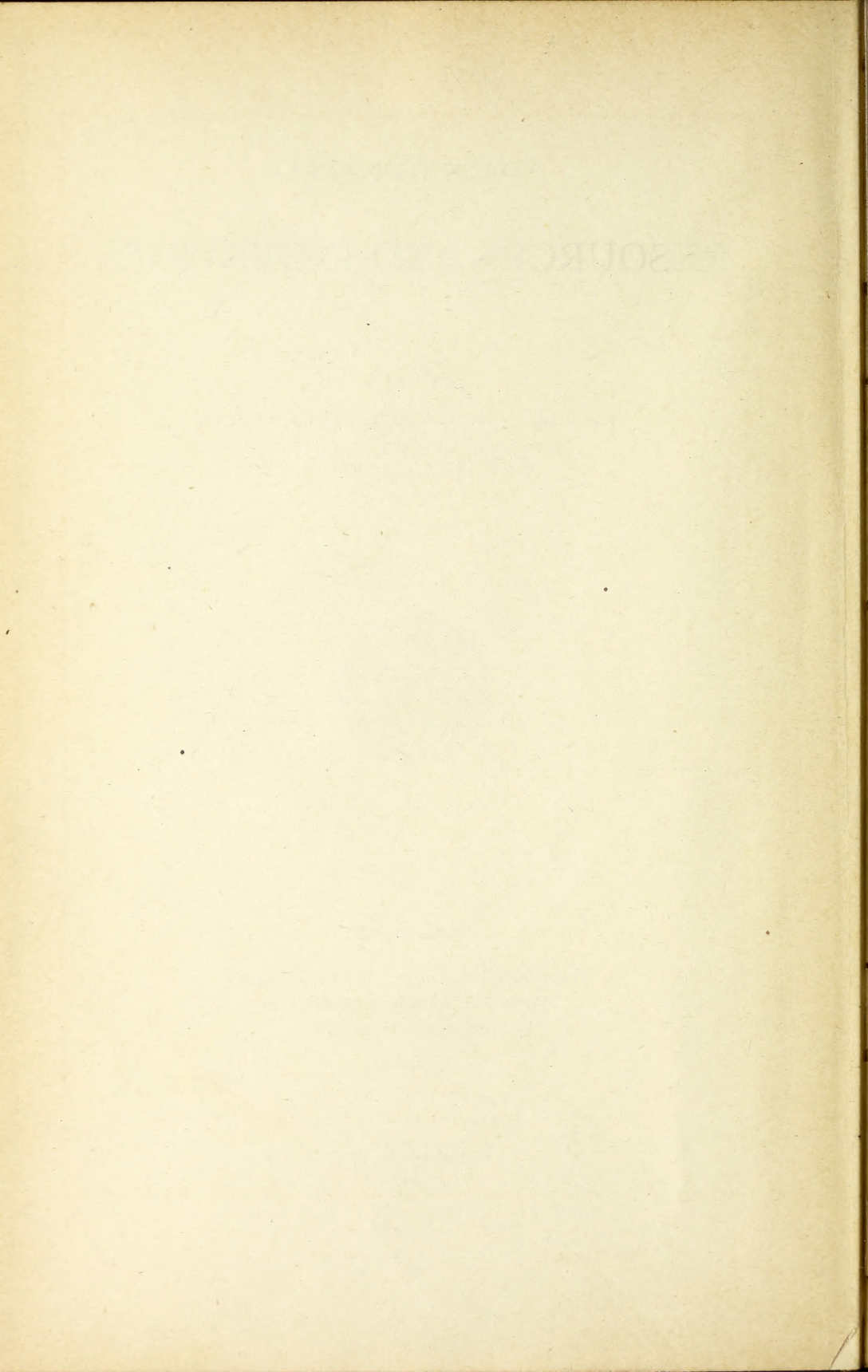
The State of North Carolina Department of
Conservation and Development
Wade H. Phillips, Director



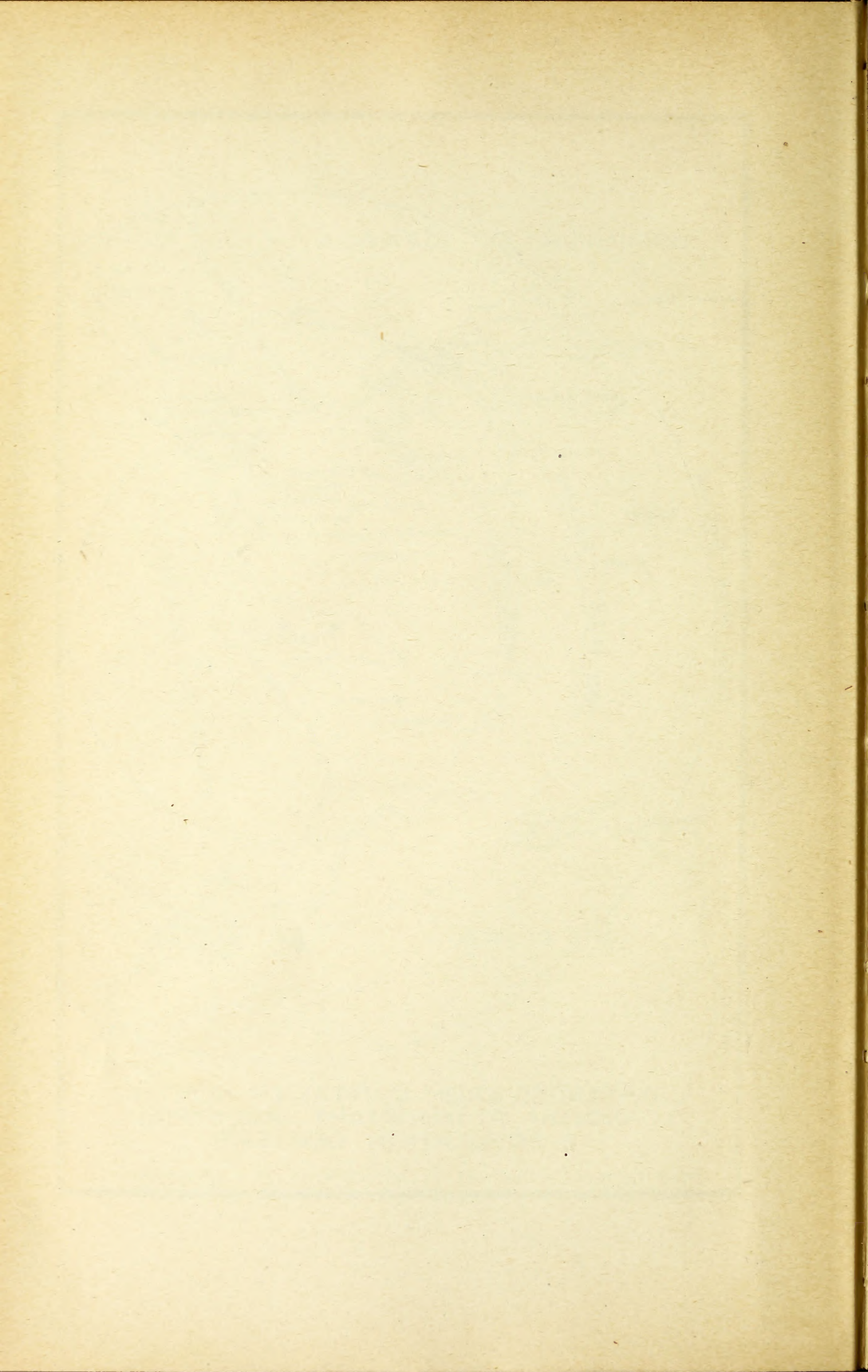
PREPARED BY

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Raleigh, N. C.
1929







FOREWORD

BY WADE H. PHILLIPS, DIRECTOR

"One of our noted scientific men recently stated there is one State in the Union around which there could be built an impregnable wall and its citizens within need not be deprived of anything necessary to contribute to their health, comfort and luxury. That the mines, forests, farms and factories of that State could be made to supply all the manifold demands of our present day civilization—and that State is North Carolina."

(From a speech by Judge G. H. Bailey, delivered at the annual meeting of the Southern Industrial Development Conference, Gulfport, Miss., March 16, 1928.)

The growth and prosperity of a state depend very largely on what use the people make of their natural resources. If used wisely, these resources are a safe and permanent foundation for State building. North Carolina is blessed in the variety of her resources. This pamphlet is intended to make a brief inventory of (1), what natural wealth North Carolina possesses today and (2) to give a digest of the industries which are based, for the most part, on this natural wealth. To complete the story, further facts must be developed. A volume would be required to describe properly each division of the State's resources. It is hoped, this report may be followed by a more complete survey of these assets, together with an analysis of the commercial advantages and opportunities of North Carolina.

It is necessary to know accurately what we have in the form of raw materials and to what extents these have been developed, in order to determine what further steps may profitably be taken to advance the welfare of the State. It is important to know what industries are needed to supplement existing industries as well as what new opportunities our State affords. It is equally valuable to know what lines of production are overdone, in order to discourage further expansion in fields which offer little or no opportunity for success.

It is remarkable that the three big developments in North Carolina in recent years have all come about at one and the same time. In the last twenty years the value of products from North Carolina factories has increased 433 per cent from \$216,656,000 in 1909 to \$1,154,646,612 for the year 1927. During the same period the State built more than 7,500 miles of good roads at a cost of about \$155,000,000, while expenditures for education increased more than 1,000 per cent or from \$3,178,950 in 1909 to more than \$35,000,000 in 1928.

Agriculture has also shared in this rapid growth. The value of the crops in North Carolina for 1909 was \$131,072,000 and for 1927 was \$361,605,000, showing 175 per cent increase.

In the same period the output of furniture has increased 3,400 per cent or from \$1,547,000 in 1909 to \$53,551,000 in 1927; mineral products 340 per cent or from \$2,874,000 in 1909 to \$12,619,000 in 1927; forest and timber products 360 per cent or from \$33,525,000 in 1909 to \$153,190,000 in 1927.

In spite of the trend toward manufacturing, the State is still fairly well balanced. A more complete development of natural resources should make it even more so.

Almost every county in North Carolina contains some resources and opportunities not to be found in other counties. It is hoped that the county statistics contained herein may be helpful in determining some of these advantages.

While North Carolina's progress has been largely brought about from within, by her own people, the State will continue to welcome friends from other States who are invited to share, on equal terms with her citizens, in the further development of her resources together with an equal share of the happiness and responsibility which go with every worthy undertaking.

**NORTH CAROLINA
RESOURCES AND INDUSTRIES**

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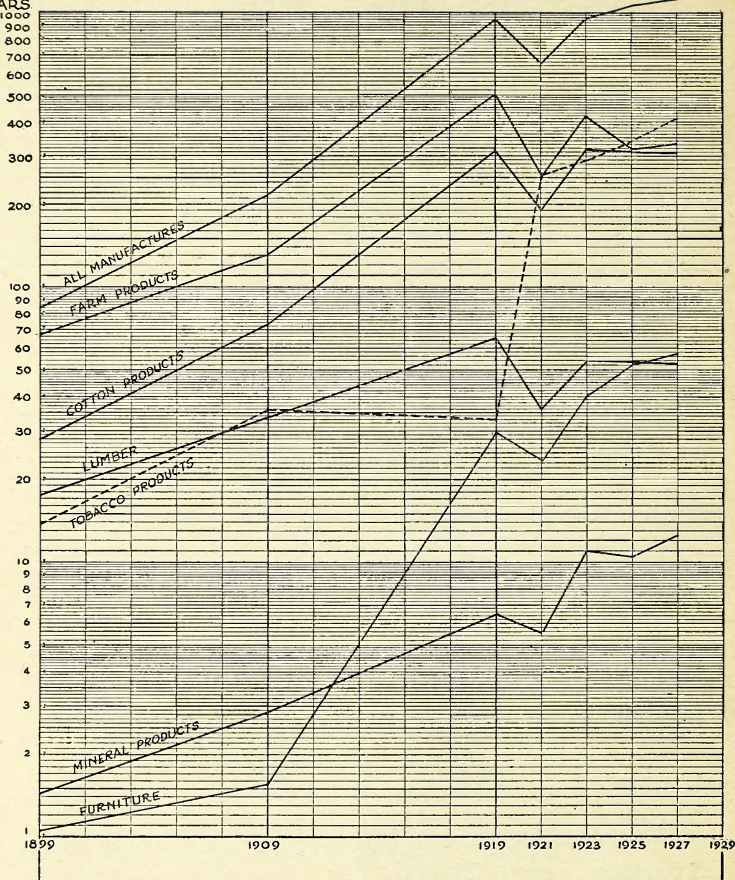
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TREND OF LARGEST INDUSTRIES IN NORTH CAROLINA 1899 to 1928

MILLIONS
OF DOLLARS



Trend of Largest Industries in North Carolina, 1899 to 1928

	1899	1909	1919	1921	1923	1925	1927
All Manufactures	\$85,274,000	\$216,656,000	\$943,808,000	\$665,118,000	\$951,911,000	\$1,050,434,000	\$1,154,617,000
Agriculture	68,625,000	131,072,000	503,229,000	252,376,000	434,733,000	339,001,000	361,605,000
Cotton	28,373,000	72,680,000	318,368,000	190,990,000	326,572,000	316,069,000	310,802,000
Lumber (Including Planing Mills)	17,442,000	33,525,000	66,328,000	35,772,000	54,243,000	54,062,000	53,190,000
Tobacco Products	13,851,000	35,987,000	33,188,000	253,296,000	295,775,000	343,076,000	413,274,000
Mineral Products	1,438,000	2,874,000	6,405,000	5,676,000	11,050,000	10,699,000	12,619,000
Furniture	1,023,000	1,547,000	29,725,000	23,340,000	40,073,000	51,208,000	53,551,000

PART ONE

PHYSICAL DIVISIONS OF NORTH CAROLINA

North Carolina is situated on the Atlantic seaboard between 33° 50' and 36° 33' north latitude and between 75° 27' and 84° 26' west longitude, extending from north to south 187.5 miles and from east to west 503.25 miles. The eastern and western boundaries conform largely to the natural confines of sea and mountains, the former with its curving shore line, more than 300 miles in length, while the latter trends northeast to southwest along the crest of the Appalachian Mountain system for over 200 miles. The northern boundary runs almost due east and west, for about 325 miles, and the southern forms a broken line about 375 miles in length. The total area of the State is 52,286 square miles, of which 3,620 square miles are water, the largest inland water surface in any state.

The State, considered with reference to its surface features, may be divided into three parts: A western or mountain region; a central, plateau region, usually designated as the "Piedmont" plateau, and the eastern plains, usually designated as the "Coastal Plains." These three divisions follow the Atlantic border of the United State in three belts of varying width from New England to the Gulf of Mexico.*

Mountain Region.—The mountainous district is part of what is known throughout the eastern portion of the country, from Pennsylvania to Alabama, as the Appalachian Region. These mountains form a series of connected ranges that, in North Carolina, reach a height well above 6,000 feet, the highest peak being Mount Mitchell, 6,711 feet, the tallest mountain in eastern North America.

This entire western section is a rugged, mountainous plateau, lying between the Piedmont and the crest of the Smoky Mountains, the western boundary of the State. The length of this plateau is over 200 miles and varies in width from fifteen to fifty miles; its total area being nearly 6,000 square miles. The Smoky Mountain chain has a general elevation of from 5,000 to 6,000 feet, rising in many summits to 6,500 feet and above. This range is broken, to the level of 2,000 or even 1,200 feet, by several deep water gaps, the Hiwassee, the Tuckasegee, and French Broad river gaps being the most important. The Blue Ridge is a very sinuous, angular, and straggling chain, about midway in the State, north and south, with an elevation of from 3,000 to 4,000 feet, a few of its higher summits, reaching nearly 6,000 feet. This chain of mountains forms the eastern boundary of the mountainous plateau while its eastern slopes form the western boundary of the Piedmont region.

The Smoky Mountain and the Blue Ridge chains are connected by many north and south cross chains, of equal elevation or even greater height than the two main chains. In one of them, the Black Mountains, is Mount Mitchell, and the cross valleys have an elevation of from 2,000 to 3,000 feet, with smaller benches and marginal plateaus of from 3,500 to 4,000 feet. The most rugged part of the mountain district is found in the Linville Falls region where many of the gorges, or canyons, reach a depth of 1,500 feet or more.

*See map, part two, page 84.

Piedmont Region.—The central hill country, known as the Piedmont Plateau, attains a greater width in North Carolina than in the States to the north of it, and is also higher, the western margin having an altitude of 1,200 to 1,500 feet above sea level. At places there are precipitous spurs of the Blue Ridge mountains projecting eastward and southeastward across the Piedmont in irregular, straggling ranges.

The most prominent topographical feature of this middle region of the State is a succession of broad-backed swells, which have an eastward and southeastward trend. These constitute the water sheds between a number of the large rivers which rise in the upper Piedmont or on the flanks of the Blue Ridge and reach the Atlantic through a system of wide valleys, 300 to 500 feet below the intervening divides. The area of this region is about 22,000 square miles; its altitude, descending gradually from 1,500 to about 300 feet, with an average elevation of close to 1,000 feet.

Coastal Plain.—The eastern section of the State, known as the Coastal Plain, extends from the Atlantic Ocean, on the east, to the Piedmont Plateau on the west. Its area is about two-fifths of that of the State, embracing, wholly or in part, forty-two counties, and exceeding 21,000 square miles in extent. Its western boundary passes through Northampton, Warren, Halifax, Franklin, Wake, Johnston, Chatham, Lee, Moore, Montgomery, Richmond and Anson Counties. Along its western margin in this State it is often hilly, especially in the southwestern corner, where it forms the Sandhill district. In this district the rivers as well as smaller streams cut through the softer Coastal Plain deposits to the harder rocks of the Piedmont Plateau, which underlie this entire area. The Sandhills often appear as extensions of the Piedmont Plateau, and attain elevations of from 400 to 500 feet. North of the Sandhill region the western border of the Coastal Plain seldom rises above 400 feet.

To the eastward this region passes from one broad flat, or gently sloping plain or terrace, to another until it reaches tidelevel, where it embraces swamps, marshes, bays and sounds covering wide areas—the latter area, from fifty miles inland from Hatteras, being less than twenty feet above sea level. In the northeastern corner of the State we find the great Dismal swamp, containing the most extensive black-soil district of the State. The ocean is walled off from these low areas by a chain of sand islands, or dunes, ranging from 75 to 100 feet or more in height and this wall is cut at half a score of places by inlets which connect the sounds with the ocean. The extreme width of the Coastal Plain is 125 miles.

Soils of North Carolina.—The three chief soil divisions of the State approximate in outline the three recognized surface divisions. The soils of these three chief regions are divided into a great number of soil-types; these types are further divided into series, all the names of which it would be impracticable to give here. These soils are of such a wide variety that almost any agricultural crop can be grown, thereon, where the growing season is of sufficient length and the temperature is suitable.

The Coastal Plain Soils.—The soils of this region are divided into three rather distinct subdivisions, namely, the Sandhills, the middle Coastal Plain, and the Flatwoods. In the first named area, the soil comprises something like one million acres, in the Sandhills proper, and patches of these

soils occur in other surrounding counties. The middle Coastal Plain area extends from the Sandhills and Piedmont eastward to the Flatwoods area. The transition is rather gradual; roughly, it extends from about the center of Hertford County on the Virginia line, down through the middle Coastal Plain counties to the western part of Columbus County on the South Carolina line. The Flatwoods area covers the remainder of the Coastal Plain east of this line.

The Sandhills area consists usually of more or less rolling sandy and sandy-loam soils, the drainage generally being excessive. The chief soils of the Sandhills area are the Norfolk, Hoffman, Ruston and the Guin series. Until a few years ago this entire Sandhills area was considered almost worthless but today it is the most important peach and dewberry producing center of the State.

The middle Coastal Plain soils are classified on the basis of drainage, consistency of subsoil and color. This area contains such soils as Norfolk, Marlboro, Ruston, Orangeburg and Greenville. The Norfolk series, which is by far the most important of this area,—about 54% of the total,—consists of gray sandy soils with yellow sandy clay subsoils. It is a very important cotton soil. It is the chief soil in the bright-leaf tobacco sections of the State. It produces almost any crop grown in the Coastal Plain, such as tobacco, cotton, corn, early potatoes, canteloupes, watermelons, cucumbers and general truck crops.

The Norfolk is an acid soil and is so low in plant food that it always requires complete fertilization for profitable crop yields. In some instances, nitrogen may be left out when a leguminous crop, like crimson clover, is turned under to supply nitrogen. It is a very profitable farming soil and gives as good cash returns as any soil in the country.

Flatwoods Soils.—Soils in this area are quite similar to those of the middle Coastal Plain. The Marlboro series is closely related to the Norfolk series and is sometimes mapped as a phase of it. It contains a little more fine material, such as clay, than the Norfolk. In agriculture it is considered one of the best cotton soils of the State. The Ruston soil occurs both here and in the middle Coastal Plain. It is a very important soil for cotton but not quite so good for tobacco. The true sandy loam is the most extensive type and the fine sandy loam ranks second.

Another series of soil, known as the Portsmouth, is very important in the Coastal Plain. It consists of black or very dark gray top soil underlain by a lighter gray layer. The types of this series include the sand and fine sand, sandy loam and very fine sandy loam as well as the loam. These soils occur in flat areas, poorly drained and some of them occur in rather swampy areas, especially near the coast. The hardwood swamps are on the sandy loam soils. The sandy soils are very low in agricultural value but the sandy loam and loam types make very good farming soils. These soils are excellent for corn and when well drained are also very good for cotton, potatoes and truck farming. Usually the utilization of these soils for trucking is dependent upon favorable location for markets.

Piedmont Soils.—The main soil series of the Piedmont section is known as the Cecil and at one time all of the soils were so mapped. The color is usually red. The texture of these soils ranges all the way from gravelly and coarse sandy loams to clay loams and clays and they produce a great

variety of agricultural products. The heavier clay types are especially suitable for the growing of cotton and corn, while the sandier types produce considerable tobacco which is darker in color than that produced on other types of soil. The clay loams are especially adapted to the production of forage, clover and hay crops, making this region favorable to dairying. In addition to these agricultural products the small grain crops are grown successfully here.

The hardwoods, such as oak and hickory, are especially adapted to these soils. The tree growth is very good which indicates a strong soil. On the cut-over lands, where the soil is more or less sandy, a second growth of short-leaf pines is found.

Mountain Soils.—West of the Piedmont section, except in the western parts of Cherokee, Graham, Swain, Haywood and Madison Counties, the soils are classed as mountain soils. However, in some of the counties where the rivers have cut deep gorges, as in Macon and Cherokee Counties, there are patches of Piedmont soils.

Since most of the rock of the Mountain area are of the metamorphic type the soils are very closely related in both physical and chemical properties.

The Porter soils are brown, with redish brown friable subsoils. They are loamy in texture and are chemically rich in all plant food constituents, especially potash. These usually occur above the 2,000 foot level. The Burton soils, which occur in coves and on the north shady slopes, are usually rich in organic matter. The Ashe soils found in the northwestern counties above 3,000 feet are very fertile.

Other soils of lesser important occur in various parts of the mountain section. Soils from the mica schists are usually very poor.

The soils of the Mountain section, as a whole, are fairly productive. The principal crops are corn, hay, potatoes, cabbage, fruit and some small grain.

Note: Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Geologic Making of North Carolina; Bulletin No. 23, price 15 cents, Forest Conditions in Western, N. C.

MINERALS AND PRODUCTS

North Carolina has long been called "Nature's Sample Case," from its great variety of minerals. There are 284 species and subspecies of minerals which have been identified in this State. Of this number seventeen were first identified in North Carolina, sixty-eight are of economic value and of this group thirty-four are known to occur in sufficient quantity to be of commercial value, and thirty have been mined during the past few years.

The types of minerals found in this State include every variety of the common rock-forming minerals, as mica, feldspar and quartz. There are also found many of the rare group including several of the precious stones, as diamond, ruby, hiddenite as well as many varieties of beryl and quartz. All of the iron and copper ores have been identified. The radio-active ore, uraninite or pitchblende, occurs in small quantities, along with the feldspar, in many of the western counties.

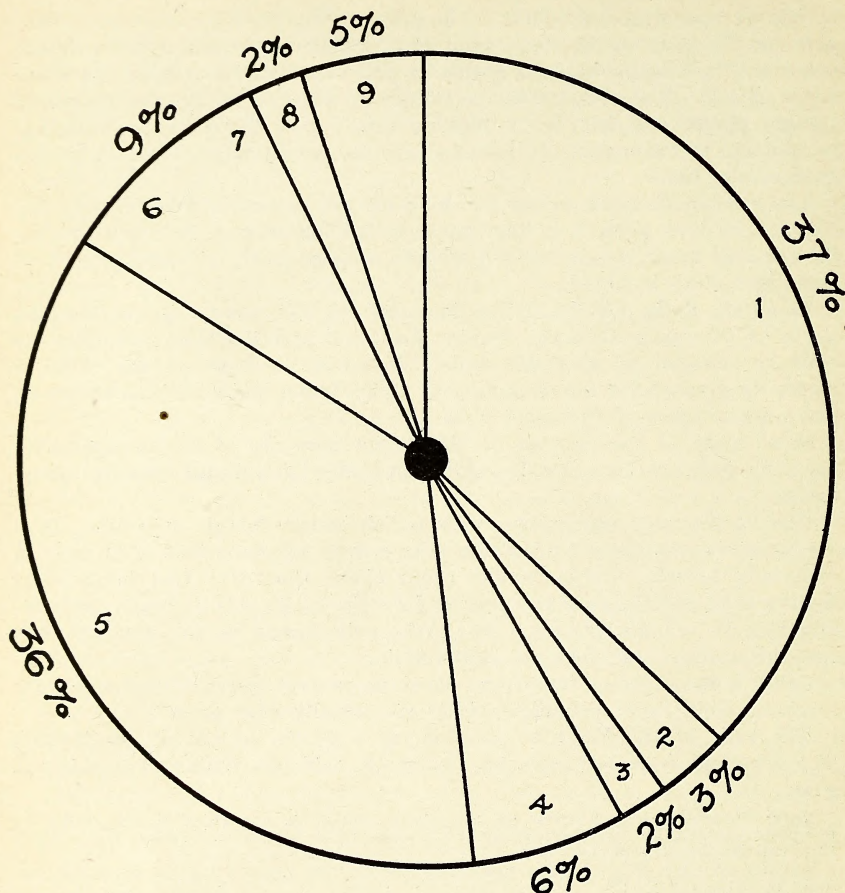


Chart for Proportion of Mineral Products in
North Carolina in 1926

INDUSTRY	VALUE	PERCENTAGE
1 Brick and Tile	\$4,225,653	37%
2 Clay (Kaolin)	331,487	3%
3 Coal	243,000	2%
4 Feldspar	602,020	6%
5 Stone	4,140,828	36%
6 Sand and Gravel	968,021	9%
7 Mica	204,410	2%
8 All Others	558,805	5%
Totals	\$11,274,224	100%

Up until the time of the great California gold rush in 1849, North Carolina was the leading gold producing state. Ever since the first gold discovery in 1799, on the Reed Plantation, the metal has been mined in varying amounts each year. The total value of the production recorded up to 1927 was \$23,661,400, but it is probable that much gold was produced which was never reported to the government offices.

Metals Produced.—Other metals than gold, which have been produced in North Carolina in varying amounts, are copper, lead, zinc and iron. This State ranks second among the eastern states in the production of copper. The principal copper belt is located in Swain County where it can be traced for a distance of about thirty miles, but it has been produced at only two places, namely, on Eagle and Hazel Creeks. Lead and zinc were mined for many years but are not produced at the present time. Iron ore occurs at many places throughout the State but the chief producing areas are Avery and Cherokee Counties. The ore from Avery County is magnetite, which produces an iron from which is made the finest grade of steel manufactured in America.

Non-Metallic Minerals.—Feldspar, mica, clays and building stones are the most important economic minerals of this State. The production of these materials increases annually.

Feldspar, mica and kaolin clays are restricted principally to a belt 100 miles long and fifteen to twenty miles wide, which parallels the Blue Ridge Mountains. This belt begins in Avery County and extends in a southwest direction through Mitchell, Yancey, Buncombe, Haywood, Jackson, Transylvania, Macon and Clay Counties. Mica has been produced also in Surry, Rutherford, Cleveland, Lincoln and Catawba Counties. A new kaolin clay plant is being erected in Cleveland County.

Clays and shales suitable for brick and tile are found distributed through a great number of the counties of the State. In 1927, seventy-one brick plants were in operation in forty-two counties with a total production of nearly five million dollars. Henderson County leads with five plants. The chief producing centers are near Sanford, Monroe and Hendersonville. Bricks produced in the Sanford and Monroe areas are shipped to many parts of the world and recent tests made at State College show that they rank with any made in America.

Stone.—Building stone is found in all three of the physiographic divisions of the State, namely, the Coastal Plain, the Piedmont Plateau and the Mountain region. The chief granite producing centers are near Henderson; Vance County, near Salisbury, Rowan County and Mount Airy, Surry County. The chief marble and limestone areas are Cherokee, Madison, Henderson and McDowell Counties. Practically all varieties of building and ornamental stone are found, including: granites (white, gray and pink); gneisses; trap; rhyolite, marble and limestone (white, blue and gray); sandstone; and serpentine. There is no other state that has a greater variety and more extensive deposits of building stone.

MINERALS AND PRODUCTS IN NORTH CAROLINA

Mineral	Value 1926	Value 1927
Brick and Tile	\$ 4,225,653	\$3,834,494
Clay (kaolin)	331,487	327,688
Cement Products		671,242
Coal	243,000	191,000
Copper	178,416	*
Feldspar	602,020	612,214
Gold and Silver	1,644	1,018
Granite	3,802,017	4,597,318
Iron	33,045	81,753
Limestone, etc.	338,811	478,224
Mica	204,410	114,514
Pottery	31,248	25,192
Quartz	17,457	19,853
Sand and Gravel	968,021	871,416
Talc, etc.	97,004	*
Miscellaneous	199,991	*793,076
Totals	\$11,274,224	\$12,619,002

*Includes copper, talc, etc.

MINERALS AND PRODUCTS IN NORTH CAROLINA

Total Value Mineral Production

1922	\$ 7,483,305
1923	11,050,257
1924	10,163,435
1925	10,699,422
1926	11,274,224
1927	12,619,002

Favorable opportunities for the mineral industry in North Carolina include the following:

Feldspar.—Exceptional opportunities for expansion in feldspar in this State are afforded by the large number of undeveloped feldspar deposits, the more favorable climatic conditions than found in northern states and Canada, the abundance of good labor available, and the development of the State's good roads.

Mica.—This State produces the best mica known, in the mines now in operation, and offers many other sites.

Marble.—In the western part of this State occurs some high-grade marble deposits. This stone is especially suitable for building material, crushed stone, tombstones, lime and terrazzo flooring. None is produced here and the marble used in this State comes from other states.

Portland Cement.—North Carolina consumes about two and one-half million barrels of cement annually but produces none. Suitable material of best quality and ample quantity is found in Craven and Jones Counties.

White Ware Plants.—The chief constituents of white ware bodies are feldspar, quartz, and kaolin, which are produced in this State, shipped to northern plants and re-shipped south. There are seventeen plants in

Ohio which use North Carolina feldspar exclusively and eleven of these use the North Carolina kaolin clays. The opportunity for local manufacture is of the best.

Note: Detailed data obtainable:

Economic Papers; No. 49, price 20 cents, Mining Industry in N. C., 1913-17; No. 55, price 25 cents, Mineral Industry in N. C., 1918-1923; No. 58, price 5 cents, Oil Prospecting Well Near Havelock, N. C.; No. 59, price 10 cents, Oil-bearing Shales of Deep River Valley; No. 60, price 15 cents, Mineral Industry in N. C.; Bulletins; No. 2, price 25 cents, Building and Ornamental Stones in N. C.; No. 11, price 5 cents, Clay Deposits and Clay Industries in N. C.; No. 19, price 4 cents, Tin Deposits of the Carolinas; No. 21, price 15 cents, Gold Hill Mining District of N. C.; No. 22, price 15 cents, Cid Mining District, Davidson Co., N. C.; No. 25, price 15 cents, Zicon Monazite, etc., Used in Lighting Apparatus; No. 28, price 15 cents, Limestone and Marls of N. C.; No. 29, price 50 cents, Kaolins of N. C.; No. 31, price 50 cents, Brown Iron Ores in Western N. C.; No. 32, price 15 cents, Magnetic Iron Ores of Western N. C.; No. 33, price 10 cents, Deep River Coal Field of N. C.

FOREST RESOURCES AND INDUSTRIES

There are three general forest regions in North Carolina which differ in commercial species, in topography and in the methods of logging and type of industries.

Mountain Region.—The mountain forest region occupies approximately the western one-sixth of the State. Many of its higher mountains have been covered with a dense spruce and balsam forest, much of which has been cut over. In the area being set apart for inclusion in the Great Smoky Mountains National Park is located the larger part of the remaining stand of this type.

From an elevation of some 1,500 feet up to the spruce type, or the tops of the lower mountains, a mixed hardwood growth occurs. Hemlock, white pine, and three species of yellow pine are also found. Most of these softwoods have been cut over but are coming back in second growth where fires are kept out. Among the principal hardwoods are red and white oak (several species), yellow poplar, chestnut, hickory, maple and basswood. The ash, cherry, walnut and locust have largely been removed. Yellow poplar and the other more valuable species return in second growth where fire is prevented. The second growth forests of this region are generally in very fair condition.

Piedmont Plateau.—From a contour of approximately 1,500 feet eastward to the fall line at the edge of the Coastal Plain, a mixed forest of hardwoods and pine prevailed. Of the original forest little pine remains; the hardwoods are largely red and white oaks, hickory and a little yellow poplar. Much of this region once cleared and cultivated, has reverted to forests, almost entirely second growth yellow pine, chiefly shortleaf and spruce pine.

Coastal Plain.—The slightly rolling or level region from the fall line of the Piedmont to the sea supports a pine forest on the better drained soils and a mixed hardwood forest on the swamps and river bottoms. Longleaf pine flourishes throughout the southern and eastern part on the dryer and sandy lands, but on most areas has been replaced by second growth loblolly pine. Longleaf in commercial quantities is scarce but second-growth stands are increasing in the southeastern and sandhill counties. Loblolly pine, known in the markets as North Carolina pine and

locally as "Shortleaf," is the chief commercial tree of the region. Where fires are kept out it grows rapidly and reproduces abundantly. Young stands are maturing continually and, with proper management, a perpetual supply should be available.

The hardwood bottoms produce oaks, hickory, ash, sweet and black gum, while deeper swamps contain a larger proportion of gum together with some cypress and in some places considerable areas of white cedar, locally known as juniper. "The Banks," along the coast, were originally covered with oak and pine timber but practically all of this has been removed.

Forest Industries.—Railroad logging on a large scale has been carried on in eastern and western North Carolina. This is gradually changing to smaller operations, such as have been common in the Piedmont region. The good roads of the State make it practical to transport logs by motor truck, to the medium size sawmill, from which good quality lumber is produced. There is undoubtedly an opportunity for the establishment of more light band sawmills, which will cut from ten to thirty thousand feet per day, in central communities, where labor can be trained and employed full time. With the disappearance of mature timber and the gradual establishment of second growth there will develop a permanent supply of saw-timber, within cheap hauling distance of such communities, which will do much to stabilize the industry. Both the mountain hardwoods and the pine of eastern North Carolina are finding ready market throughout the east.

The production of tanning extract from chestnut wood and hemlock and oak bark has very largely exhausted the supply of the latter, while the chestnut bark disease will before long exterminate the chestnut trees. This industry, which has brought considerable revenue to the landowners of western North Carolina, will gradually decline.

The use of many different species of timber for pulpwood will undoubtedly increase. Many of the hardwoods, as well as the softwoods, are being used in western North Carolina, while pine is the chief source of supply farther east. Timber becomes salable for pulp long before it does for saw timber. Quicker returns will, therefore, justify earlier cutting and bring in greater revenue. The large acreage of second growth forest throughout the State is a guarantee of a supply much greater than the present demand.

Among the smaller industries are the production of poles, chiefly pine, chestnut, and juniper. Cross ties are cut from white oak chiefly in the Piedmont. Other species, including pine, are cut and chemically treated before using. Shingles are cut chiefly from cypress and juniper and a lesser number from pine. Sawn staves from gum and pine are produced along the coast.

According to the figures of the United States Bureau of the Census, North Carolina uses as much wood for fuel as any other state. In addition to its use for household purposes large quantities are consumed in the curing of tobacco.

There is of necessity much waste in the utilization of timber. Industries which use slabs, sawdust, short lengths, or other kinds of non-utilized wood, can find a supply of a large number of species of such material available where those species are being cut in North Carolina.

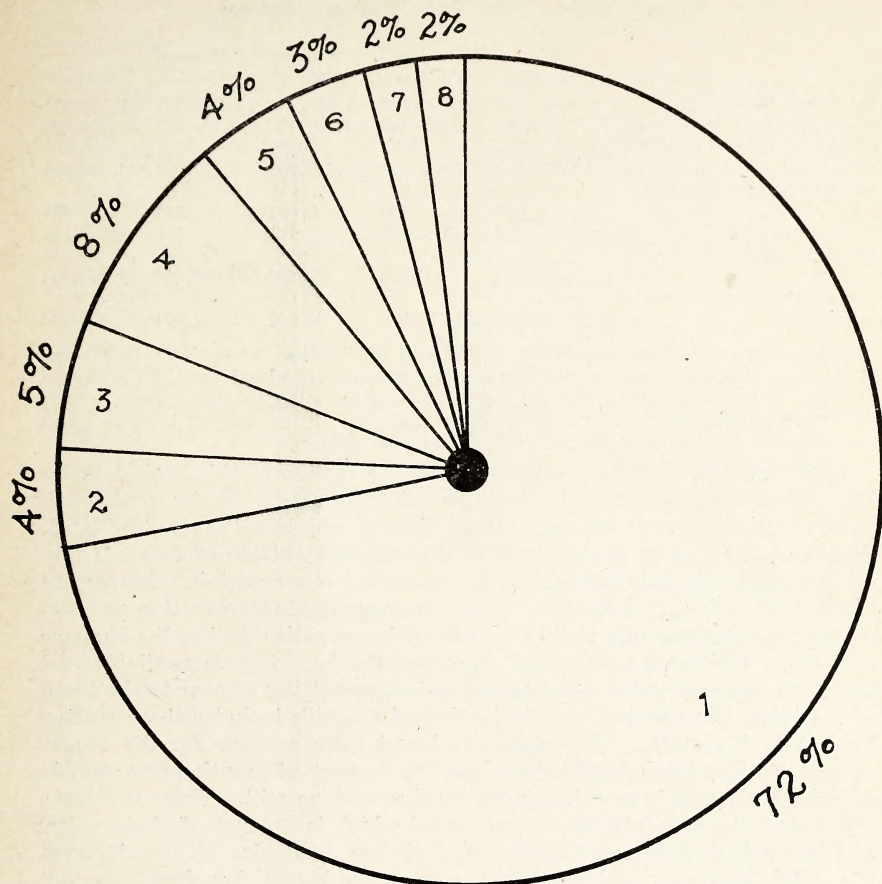


Chart for Proportion of Forest Products in
North Carolina in 1927

INDUSTRY	QUANTITY	PERCENTAGE
1 Yellow Pines	750,500 M Ft.	72%
2 Spruce	38,500 " "	4%
3 Other Soft Woods	54,815 " "	5%
4 Oak	82,234 " "	8%
5 Chestnut	41,164 " "	4%
6 Gums	28,474 " "	3%
7 Yellow Poplar	21,140 " "	2%
8 Other Hardwoods	23,868 " "	2%
Totals	1,040,695 " "	100%

TIMBER STAND AND PRODUCTION BY REGION

	Mountain	Piedmont	Western Coastal	Eastern Coastal	State
Total Area, Acres	6,464,640	10,647,680	6,833,280	7,248,000	31,193,600
Forest (Woodland) Area, Acres	4,437,390	6,214,630	4,450,130	5,954,250	21,056,400
Percentage of Forest Land	69%	58%	65%	82%	68%
Total Stand M. bd. ft.	5,178,000	2,402,000	2,680,000	3,130,000	13,420,000
Average Stand per Acre Forest					
Land bd. ft.	1167	380	602	526	634
Number Sawmills	735	627	411	367	2,140
Annual Lumber Production M. bd ft.	228,000	454,000	280,000	380,000,000	1,342,000
Stumpage Value of Timber Cut Annually	\$1,905,000	\$2,220,000	\$1,163,000	\$1,982,000	\$7,270,000

The above table showing timber stand and production by regions, is a compilation of the figures given under County Reports, classified by physiographic regions. Every effort has been made to include all mills in this report, which therefore exceeds the U. S. Census figures, as the latter do not include mills cutting less than fifty thousand board feet per annum.

Timber Resources by Counties.—Under the section of this book describing each county will be found statistical information on its timber resources. The acreage and percentage figures are based upon the U. S. Census of 1925, upon the supposition that all land outside of farms is forest land which is only approximately correct. The remaining figures are based upon estimates collected by the Department of Conservation and Development whose agents visited the respective counties during the summer of 1928. While only estimates, they are the best figures available and they have been compiled with the one object of getting as near to the truth as possible. The number and production of sawmills includes those cutting lumber during 1927. The values are based upon average for the county or region. The total stand is based on the amount of saw timber available of such a class as is now being cut by the average mill. There are large quantities of wood suitable for pulpwood which is not yet of timber size, and is not included in the estimates of timber available. (In arriving at the total stumpage value of timber cut cordwood for fuel was not included.)

Note: Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Bulletin No. 24, price 15 cents, Loblolly or North Carolina Pine; Bulletin No. 30, price 15 cents, Wood-using Industries of North Carolina; Economic Paper No. 56, price 15 cents, Chestnut and Chestnut Blight in North Carolina; Common Forest Trees of North Carolina, price 5 cents; Conservation Laws of North Carolina.

AGRICULTURE

North Carolina ranked fourth, in 1927, in value per acre, (\$45.43), of the 22 important farm crops of the United States, it ranked sixth in total value of same, (\$314,596,000), surpassing the great Northern States of New York (\$200,197,000), Pennsylvania (\$212,212,000), Ohio (\$232,119,000), Indiana (\$192,473,000), Michigan (\$186,646,000), and Wisconsin (\$247,837,000), and exceeded only by Texas, Iowa, Nebraska, Illinois and Kansas. North Carolina's diversity of farming is shown in the accompanying table:

NORTH CAROLINA CROPS, OFFICIAL RANK BY U. S., 1927

Rank	Crop	Value
First	Tobacco	\$111,500,000
Second	Peanuts	7,875,000
Second	Soy Beans	2,397,000
Second	Sweet Potatoes	8,117,000
Second	Early Irish Potatoes	7,182,000
Third	Cowpeas	1,246,000
Third	Cucumber	688,000
Fifth	Sorghum Cane for syrup	2,236,000
Sixth	Green Peas	468,000
Sixth	Snap Beans for table	728,000
Seventh	Lettuce	785,000
Seventh	Cotton (lint alone)	83,900,000
Seventh	Cotton Seed	14,200,000

North Carolina produced more pounds of tobacco in 1927 than the next three states, in rank of production, combined, and also led in car lot shipment of strawberries. It ranked third in peach production in 1928.

Agriculturally, as well as physically, North Carolina divides itself into the three generally recognized regions, the Coastal, Piedmont and Mountain.

Coastal Plain Regions.—This area is composed of two types of land,—and within it has two other distinct regions,—the coastal “black soil,” and sandy loam or “sandhill” sections.

The black land area extends principally from the sea coast, through the flat, swampy country, where drainage is often employed, to the sandy or sandy loam soils which extend along the coast from Virginia to Carteret County. The second type is the large sandy belt making up the remainder of the comparatively flat-land country, extending up to the Piedmont area. This belt is especially suited to truck farming, soy beans and cowpeas, as well as cotton, tobacco and peanuts. It is easily tilled, but requires heavy fertilization in the absence of green cover soil improving methods. Farming here may be done with the most modern machinery, with the consequent minimum effort and cost of operation.

The principal trucking areas are to be found in the neighborhood of Elizabeth City, Columbia, Washington, and Aurora; Bayboro, Beaufort and from Mount Olive to Wilmington. Strawberries are also grown extensively around Wallace and Chadbourn, while watermelons and cantaloupes abound in Scotland County. Dewberries and peaches are to be found principally from Hamlet to Sanford in the Sandhills.

The peanut belt embraces eight principal northeastern counties. Soy beans are grown commercially just east of this peanut belt, but extending down to the southern peanut area which includes Onslow, Pender, New Hanover, and Brunswick Counties. The principal hog producing area is in the eastern counties, where soy beans and peanuts leave enough food material in the fields for the hogs to “pick up” a good living.

It is in the Coastal Plain that occurs the famed double cropping system, whereby two to four crops may be grown on the same land during a single year. Soy beans and cowpeas play important parts in such a program. The first crop is usually either truck or a soil improvement crop plowed under in the spring, to be followed usually by corn. Oats are frequently

cut off, to be fed as a mature grain hay crop, after which corn, with intertilled crop, may follow. Small grains grow well in these counties, but the farmers do not consider them advisable in comparison with the returns from the choice of "cash crops," usually grown there. Pastures can be made to do well here and dairying may be profitably expanded. Sweet potatoes grow abundantly in this section. Bee and honey production are active here.

The Piedmont Plateau.—Extending from an approximate line from Northampton County on the Virginia line to Anson County on the South Carolina border of the State, this section is a rolling, hilly country made up principally of stiff clay soils. In this territory are located the principal small grain farms. The southern section is the cotton belt, while the northern counties are given over largely to the production of tobacco. The middle counties are not dependent on any cash crop, but have a well diversified farming program. The soils are easily improved by legume crops and hold their fertility over a long period. This section cannot be tilled as early in the spring or as soon after rains as the counties in the east, and crop growth is appreciably later. This is a good fruit country and while capable of producing fine vegetables is not early enough to compete with the eastern truck producing counties for the northern markets. The region is well suited to dairying. While hilly in nature, the soils do not erode as quickly as in the east, due to the absence of sand in their composition.

Mountain Counties.—Varying in elevation from 1,300 feet to 4,000 feet, the mountain farming country is more suitable to grasses, fruits and vegetables than to general cropping. It contains also good fields of small grains, which really are grasses, also buckwheat, etc. Under these conditions it is a natural livestock and bee area. Sheep abound in four of the northern counties, while buckwheat grows in this same area. Something like thirty cheese factories have operated in Alleghany, Ashe and Watauga Counties, and have developed a valuable milk supply. The production is now concentrated in five active plants which are furnishing the farmers a ready cash market for their milk. One of these factories takes about 25,000 pounds of milk a month, producing upwards of 100,000 pounds of cheese annually.

Apples grow abundantly and of fine quality throughout the mountain range, while grapes are found more in the lower belt. Only a small proportion of the land is in cultivation, and although hill and mountain sides are productive as pasture lands, the cultivated areas are found in the valleys. There is an abundance of fresh water, while timber is also a big product of the land.

Note: Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Press Bulletin No. 133 Preventing Erosion in Piedmont Drainage Districts; Press Bulletin No. 157, Farm Forestry. Farm Forecaster, N. C. Dept. Agriculture.

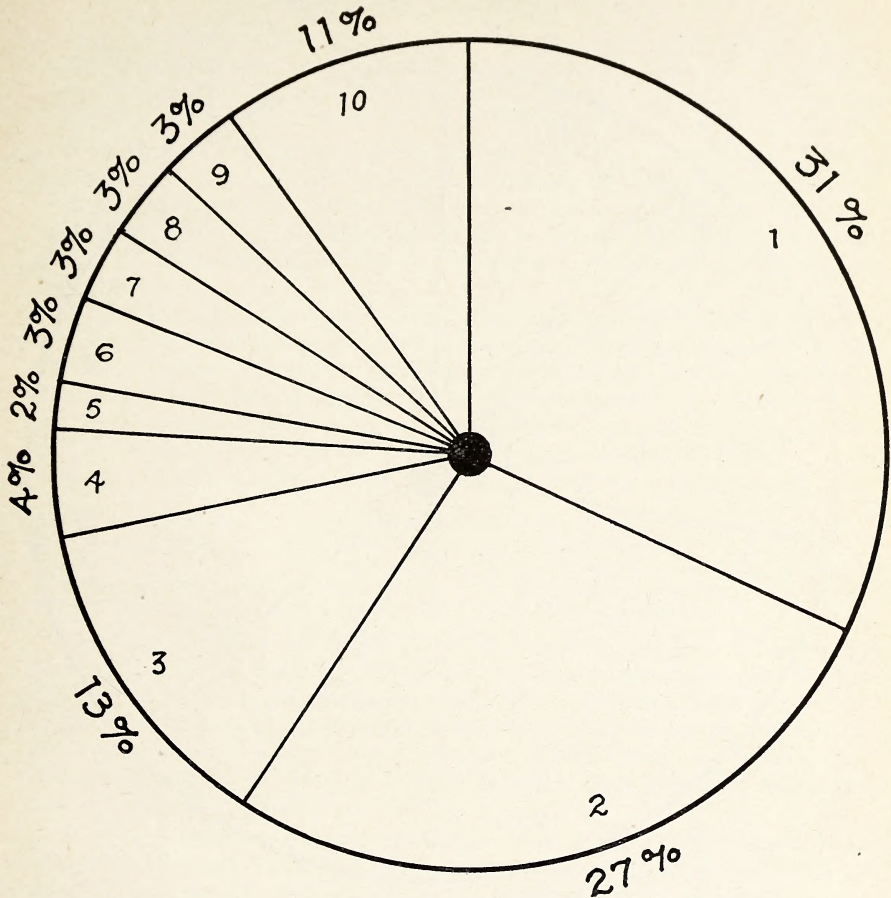


Chart for Proportion of Agricultural Products in North Carolina in 1927

INDUSTRY	VALUE	PERCENTAGE
1 Tobacco	\$111,500,000	31%
2 Cotton	98,100,000	27%
3 Corn	47,390,000	13%
4 Hay	15,210,000	4%
5 Wheat	7,500,000	2%
6 Irish Potatoes	11,300,000	3%
7 Peanuts	9,755,000	3%
8 Sweet Potatoes	8,251,000	3%
9 Fruit and Truck	12,100,000	3%
10 All Others	40,394,000	11%
Totals	\$361,500,000	100%

LEADING INDUSTRIES OF NORTH CAROLINA

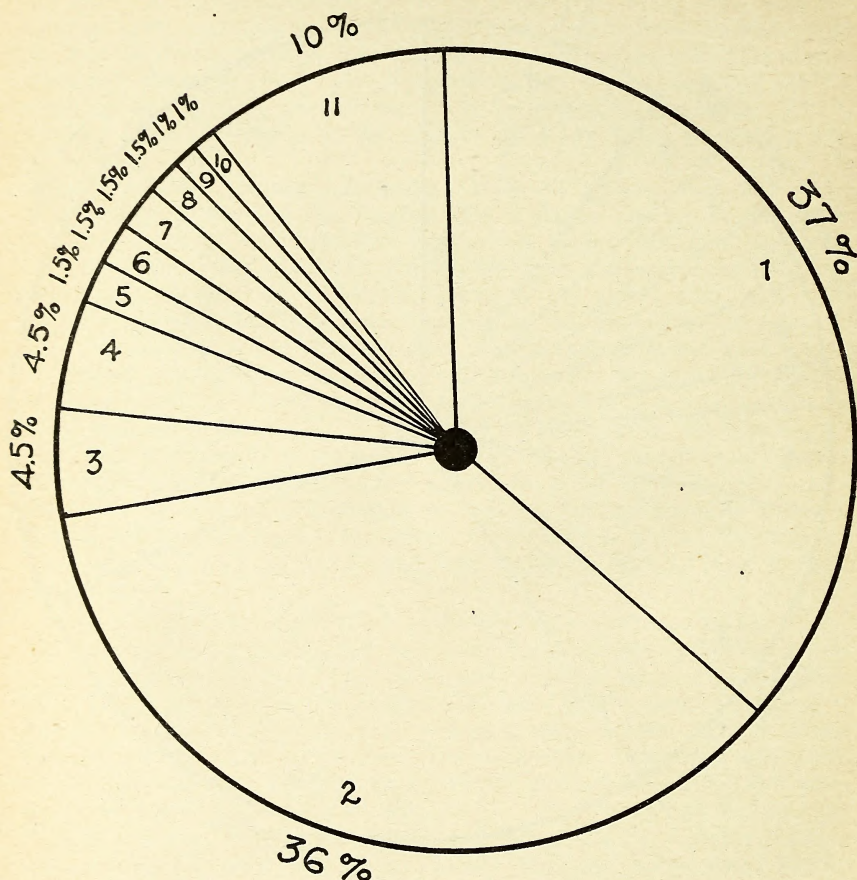


Chart for Proportion of all Products of Industries
in North Carolina in 1927

INDUSTRY	VALUE	PERCENTAGE
1 All Textiles and Products	\$425,437,522	37.0%
2 Tobacco Products	413,274,114	36.0%
3 Furniture	53,551,221	4.5%
4 Lumber, including Planing Mills	53,189,652	4.5%
5 Fertilizer	18,293,687	1.5%
6 Flour and Meal	17,847,452	1.5%
7 Cotton Seed Oil, Cake and Meal	17,612,879	1.5%
8 Leather, Tanned and Cured	16,405,354	1.5%
9 Car Construction and Repair		
Steam Railways	14,447,433	1.0%
10 Printing and Publishing	12,259,226	1.0%
11 All Others	112,299,096	10.0%
Totals	\$1,154,685,626	100.0%

INDUSTRIES OF THE STATE

All Industries	Number Establishments	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
Total 1927	2,984	204,590	\$158,394,434	\$562,819,236	\$1,154,646,612	\$593,827,376
Total 1925	2,614	184,234	134,237,097	550,706,965	1,050,434,117	499,727,152

It is notable that North Carolina leads the world in value of tobacco products, and all of the United States in number of cotton mills and active spindle hours, also in the production of bedroom and kitchen furniture made from wood. It recorded an output, in 2,984 of its larger establishments, of \$1,154,646,612 in the U. S. Biennial Census of Manufacturers for 1927.

Statistics of the Industries.—Besides the four outstanding corner stones of North Carolina's great industrial structure—Textiles, Tobacco, Timber, and its offspring, Furniture (as described in separate chapters following), many important and profitable classes of manufacture are prominent in the State, as illustrated by the others of the ten leaders in value of output in North Carolina for 1927, and listed in the following table:

North Carolina production in 1927 by ten leading industries was:

1. Textiles and products	\$425,437,522	6. Flour and Meal	\$17,853,055
2. Tobacco products	413,271,612	7. Cottonseed products	17,612,879
3. Furniture	53,551,220	8. Leather, cured	16,405,352
4. Lumber and planing mills	53,687,216	9. Railroad car construction	14,447,435
5. Fertilizer	18,423,536	10. Printing and publishing	12,315,484

Fertilizer.—This great North Carolina industry, although infrequently connected with the State's great industries, comes next to the four leaders in value of products amounting to over eighteen millions of dollars. This great total of output comes from ninety-three establishments situated in forty-two counties of the State, and some of these factories, such as the cotton oil and chemical companies, distribute their products nationally and even internationally.

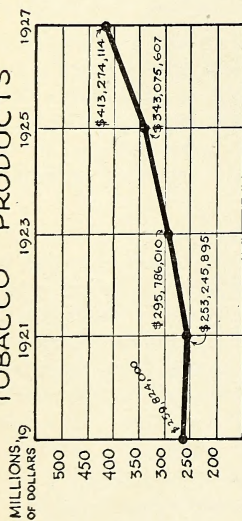
Flour and Other Grain Mill Products.—Two of the great primeval food products, flour and meal, still hold a strong position in North Carolina industries with nearly eighteen million dollars produced in the larger establishments (of over \$5,000 annual output), and many more thousands of dollars output from smaller mills. That these mills are widely distributed to serve their communities, as well as to export shipments from the State, is evidenced by the fact that the one hundred and twenty-two larger mills are located in sixty-six, or two-thirds, of the State's counties. This is an industry that, like fertilizer, intimately serves and profits the farmer in utilizing his products and furnishing him one of his chief needs.

Cottonseed Oil, Cake and Meal.—The cotton growing counties of North Carolina are well represented in the production of cottonseed products in thirty-five counties of the State. The fifty-six establishments in the State, making returns of \$5,000 or more in 1927, produced \$17,612,879, or within \$235,000 dollars as much as did the North Carolina flour mills.

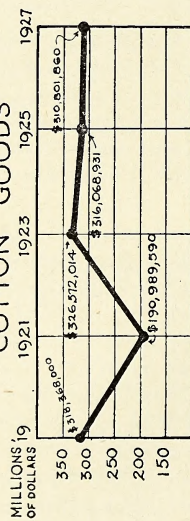
Leather, Tanned, Cured and Finished.—Another substantial North Carolina industry, which has been built up from the raw materials of its farms and forests, is the leather, tanned and cured. While this industry is not widely distributed, (being confined to only twelve larger firms located in

LEADING INDUSTRIES OF NORTH CAROLINA

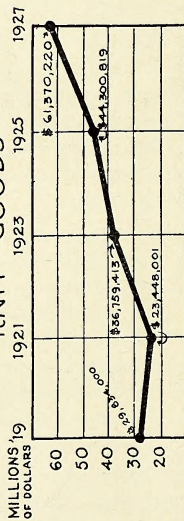
TOBACCO PRODUCTS



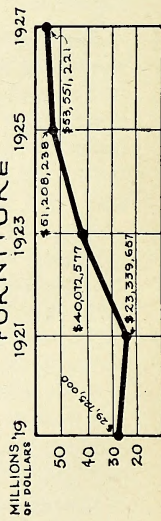
COTTON GOODS



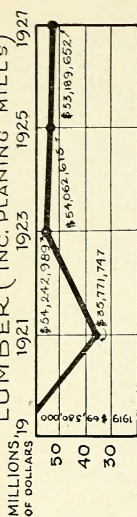
KNIT GOODS



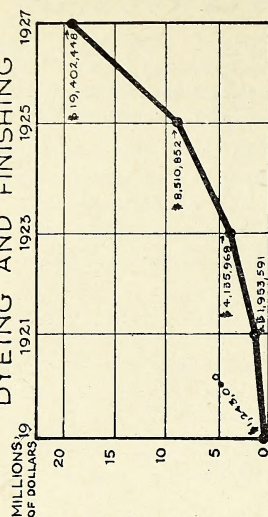
FURNITURE



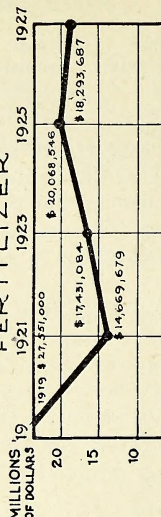
LUMBER (INC. PLANING MILLS)



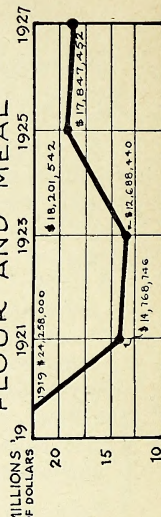
DYEING AND FINISHING



FERTILIZER

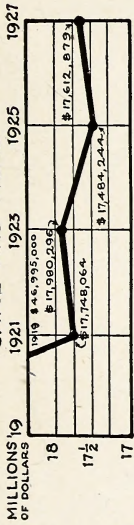


FLOUR AND MEAL

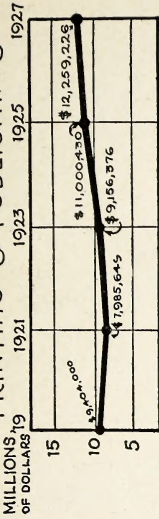


LEADING INDUSTRIES OF NORTH CAROLINA

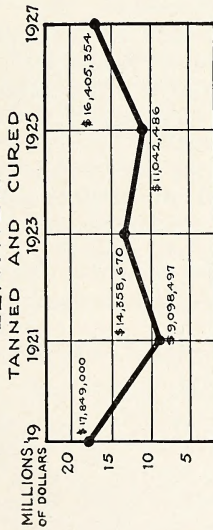
COTTON SEED OIL
CAKE AND MEAL



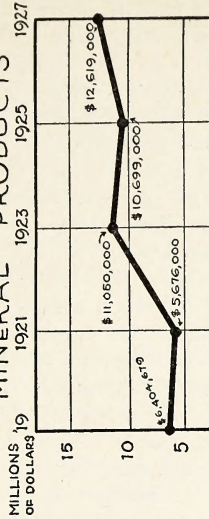
PRINTING & PUBLISHING



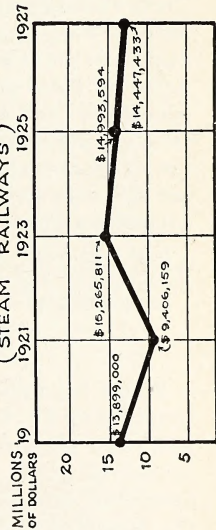
LEATHER
TANNED AND CURED



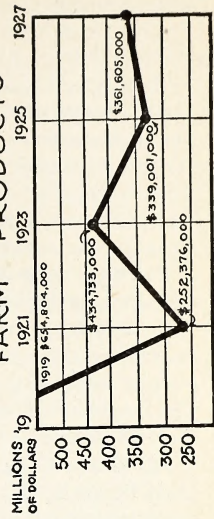
MINERAL PRODUCTS



CAR CONSTRUCTION & REPAIR
(STEAM RAILWAYS)



FARM PRODUCTS



nine counties), and while less in output than it was in 1925, yet its total output in dollars is substantial, amounting to nearly sixteen and one-half million dollars in 1927.

R. R. Car Construction and Repair.—Besides the inestimable benefit that the railways contribute to the State of North Carolina through their transportation service, they also add the majority of the business of the ninth largest industry in the State, namely the \$14,447,435 in value of the annual output of the railroad car establishments. This industry is fairly well diversified as to location, the twenty-five concerns being located in twenty-two counties of the State.

Printing and Publishing.—This, the tenth ranking industry in North Carolina, is beyond its purely financial aspect, covering, as it does, all of the newspapers and periodicals. Its importance to each community is shown by the fact that it operated establishments of over \$5,000 annual output in seventy-nine, or nearly four-fifths, of the counties of the State. The number of establishments reporting in the Census of Manufacturers for 1927 was 228 with a total output of \$12,315,484.

All Other Industries.—The 901 establishments in North Carolina (other than those in the ten leading industries above described), which reported operations in 1927, produced slightly over \$110,000,000 in value products. This number included none whose production in 1927 was below \$5,000, although the number of such smaller manufacturing establishments in North Carolina runs into the thousands. These "other establishments" reporting were located in ninety-eight counties and almost every city of the State and form a very valuable addition to the prosperity of each locality. Some of these smaller industries return a handsome percent of profit on operations and many are growing rapidly and promise to become of increasing importance in the industrial upbuilding of the State. The statistics of manufactures of all of the one hundred counties of North Carolina are given in detail in the table of all state industries and in the county summaries appearing in later sections of this book.

Note: Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Facts and Figures; North Carolina—A Good Place to Live.

WATER RESOURCES AND POWER

Water for Industrial Uses.—No matter how excellent a source of water supply may be from the standpoint of chemical quality, it is recognized that other important factors must be weighed when the establishment of an industrial plant is being considered. Herewith is presented general analytical data relating to chemical quality of surface waters with, briefly, the rainfall and drainage of the State as related elements and followed by a resume of the power situation and resources in North Carolina.

In the Piedmont and Coastal Plain the mean annual precipitation is between 45 and 55 inches with an average of about 50 inches. In the Mountain section, a situation of rather striking contrast exists. Considered as a whole it has the greatest precipitation of any section of the State, and the run-off is correspondingly large. In the vicinity of Highlands, there is a small area over which the precipitation averages approximately 80 inches a year, the highest for any section of the State, while about 75 miles to the northeast in the valley of the French Broad River there is an area

about 20 miles wide running north from Asheville to the State line where the mean annual precipitation is somewhat less than half that occurring around Highlands, being between 35 and 40 inches, which is the minimum for the State.

Considered as a whole, the Mountain Section has an average precipitation of about 60 inches, well distributed throughout the year, and innumerable streams are required to provide drainage. These streams, small in themselves in the region of their source, form the headwaters of most of the large rivers which course through the Piedmont region of the State, the Neuse and Cape Fear rivers being the principal exceptions.

Drainage.—From the general vicinity of Tuxedo, Henderson County, and extending in a north northeasterly direction, a line can be drawn on a drainage map of the State to represent the divide which will pass through, or near, Black Mountain, Newland, Altapass, Blowing Rock, and thence in a more easterly direction to the North Carolina-Virginia state line. To the west of this divide, the drainage, insofar as the main streams are concerned, is to the northwest to the Tennessee river and ultimately to the Ohio, while to the east the general direction of the drainage is to the southeast and is tributary to the Atlantic Ocean. The Roanoke, Tar, Neuse, Yadkin, Catawba, and Broad rivers are the principal streams of the Atlantic drainage; while the New, Watauga, French Broad, Little Tennessee, and the Hiwassee rivers are the principal North Carolina streams in what is commonly referred to as the Ohio Drainage Basin.

Stream Discharge.—Reference has been previously made to the fact that in considering water resources, from the standpoint of their industrial utilization, both quality and quantity are factors that must be considered. It has not been found advisable to include any information in this chapter bearing on the quantity factor in any detail, as all of the discharge data relative to the flow of North Carolina streams during the period of 1889-1923 have been published as Departmental Bulletin, Number 34, and where records are available for any part of the period 1924 to date, blueprint copies of the data will be furnished at cost.

Chemical Quality of the Surface Waters.—The Department has included in its economic paper No. 61, chemical analyses totaling 185 in number, 174 are analyses of samples from surface sources and 11 refer to samples from underground sources. Primarily, this report pertains to surface water supplies; no attempt being made to present information relative to the valuable underground water resources of the State. Fundamental analytical data on the chemical and physical quality of the waters are presented therein, and it may be obtained on request.

Water Power Development.—The data presented herewith depict briefly the conditions relating to water and fuel power developments and output of electric energy at the end of 1928, and described the undertakings in the power field planned for the following year. The table accompanying this chapter shows the ownership and location of all the principal power developments of the State. There were 811,927 horsepower actually in operation at the end of 1928. New York alone exceeds this amount of developed water power in states east of the Mississippi, and only California and Oregon, in the west, have a greater developed water power than this.

Power Output.—The production of electric energy by the public utility and municipal power plants of the State has increased each year since 1920, with the exception of 1921, the average annual rate of increase being about 15%. The total output in 1928 was 2,245,470,000 kw. hrs. Of this 88.6% was produced by water power. The annual increase in kilowatt hour output for the past nine years is shown below together with the percentage of the total output produced by water power:

Year	Percentage of Increase Over Previous Year—Total	Percent of Output by Water Power
1920	12.23	93.0
1921	—3.83	92.1
1922	30.08	88.5
1923	43.26	82.1
1924	7.86	87.8
1925	4.46	62.1
1926	16.98	59.3
1927	20.56	54.5
1928	7.62	88.6

In total output North Carolina leads all the Southern States, West Virginia being the closest competitor. In output from water power alone, North Carolina is first, exceeding even Alabama, in which is located the great plant at Muscle Shoals. In output by stream power North Carolina ranks second in the South, being exceeded only by the great coal producing state of West Virginia. The year 1928 was very heavy stream flow, hence a greater percentage of the total than in any year since 1921.

Under normal conditions of stream flow the output by hydro power is not greatly in excess of that by stream power, indicating a well balanced power system, with ample steam reserves to supplement hydro power in occasional dry seasons when stream flow is abnormally low.

Power Distribution.—The large developed power resources described above are made available over nearly the entire area of the State by means of an extensive system of high and low tension transmission lines. Over 85 per cent of the counties of the State are served by such lines. The Department of Conservation and Development has issued in color a map showing in great detail the location, ownership, and voltage of all power lines and the location, ownership and horsepower of all power stations in the State. Copies of this map may be obtained at a cost of 25 cents each.

The four principal public utility companies now have approximately the mileage of high tension transmission lines shown below:

Duke Power Company	3,850
Carolina Power and Light Company	1,515
Tidewater Power Company	125
Virginia Electric and Power Company	95
Total Mileage Electric Power Lines	5,585

If to the above are added the low voltage and miscellaneous lines in the State, there will be found a total mileage of well over 6,000.

New Development.—One new plant on the Pigeon River, in Haywood County near the Tennessee State line, to be completed in 1929, will add

90,000 horsepower, with an ultimate capacity of some 135,000 horsepower. This plant is of particular interest as differing from all existing hydro-electric projects in the State in its type of development. All the major water power developments in the State have heretofore been constructed on the larger streams in the Piedmont regions, and are dependent on producing a fall entirely by the construction of dams from 50 to 200 feet in height. The Pigeon river development makes use of a relatively small river, but by diverting it through a tunnel in the mountains over four miles long, causes the water to fall down the mountain side through steel pipes to a power house far removed from the dam, thereby developing a total fall of 861 feet, the greatest of any large water power development in Eastern United States.

In connection with future water power developments in the State, it is interesting to note that the U. S. Geological Survey places North Carolina first of all the Southern states in potential power, and second to New York of states east of the Mississippi.

Of the total amount of water power developments in operation or under construction the following percentage of distribution obtains:

1. Tallassee Power Company	37.92 per cent
2. Duke Power Company	30.84 per cent
3. Carolina Power and Light Company	24.50 per cent
4. Manufacturing plants	3.98 per cent
5. Miscellaneous private companies	1.04 per cent
6. Virginia Electric and Power Company	.86 per cent
7. Municipal Plants	.86 per cent

Total	100.00 per cent
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Steam Power Developments.—The table following, shows the ownership and location of the principal steam power developments in operation at the end of 1928. These total over two-thirds as much as the water power developments now in operation; 560,688 horsepower in steam as compared with 811,927 horsepower in water power. This arises from the fact that the water power plants cannot operate continuously at full capacity, due to seasonal fluctuations in stream flow, and these reserve steam power plants are available for periods of extreme drought. The increase in power demand, which necessitates new hydro-plants, also requires the construction of new steam plants. The public utility steam central stations in the State are nearly all of modern construction, situated adjacent to ample supplies of condensing water, and on direct rail routes from the coal fields. Hence, steam auxiliary power is provided most economically, statistics of the U. S. Geological survey showing a smaller quantity of coal required per kilowatt hour in North Carolina than for the United States as a whole.

The steam power developments now in operation are distributed as follows:

1. Manufacturing plants	44.20 per cent
2. Duke Power Company	34.40 per cent
3. Carolina Power and Light Company	11.70 per cent
4. Municipal plants	6.20 per cent
5. Tidewater Power Company	2.70 per cent
6. Virginia Electric & Power Company	.80 per cent

Total	100.00 per cent
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The larger proportion of the total power in manufacturing plants is due to the fact that numerous manufacturing plants maintain a reserve steam station in case of possible failure of the public utility electric supply, and also that some manufacturing plants find it cheaper to generate all or a part of their power by their own steam plants rather than purchase electric energy because of uses for steam in their manufacturing processes. In the latter cases the steam is first used to produce power and then is delivered for process use and hence does a double duty.

Municipal steam plants are nearly all located in the eastern section of the State, which has until recently been quite devoid of high tension transmission lines of the large public utility power companies. A number of these municipal plants are quite as efficient in producing power as the public utility sources.

Potential Water Power Sites.—Numerous undeveloped water power sites still exist in the State, capable of being developed from 500 H. P. to 50,000 H. P., exclusive of undeveloped sites now controlled by public utility companies. Most of the available undeveloped sites are located in the western and northwestern parts of the State, and are referred to in the county descriptions.

Note: Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Economic Paper No. 54, price 25 cents, Water Power Investigation of Deep River; Bulletin No. 34, price \$1.50, Discharge Records of North Carolina Streams; Circular No. 10, The Power Situation in North Carolina in 1924; Manuscript "The Power Situation in North Carolina in 1927." "Power Situation in the Southern Appalachian States," price 25 cents; Economic Paper No. 61, A Preliminary Report of the Chemical Quality of the Surface Waters of North Carolina, 1928; Map of North Carolina, counties in colors; (or without colors) drainage in blue; price on paper only \$.75; on cloth back \$1.00; Map of North Carolina, drainage in blue, outline in black, (or non-photographic blue), price 15 cents; Map of North Carolina showing stream gauging stations, with Rainfall and Temperature Data, 1928; Power Map of North Carolina, 1928 showing transmission lines with voltage differentiations, power plants with ratings and ownership; Southern Appalachian Power Map; edition of 1925, price paper \$1.00; cloth \$1.50; Map showing distribution of lines of Equal Annual Rainfall in North Carolina, price \$1.00; Map of North Carolina and parts of adjacent States, 1925, showing location of stream gauging stations and power plants.

POWER GROWTH IN NORTH CAROLINA

Year	Output in Kilowatt Hours. Public Utility Generating Stations--Totals	H. P. in Industry (a)	Total Installed Hydro H. P.	Total Installed Fuel H. P.	Total Installed H. P.
1899		230,297			
1902	8,351,346				
1904		216,622			
1905					
1907	13,171,681				
1909		378,556			
1912	70,552,737				
1914		508,085			
1917	371,711,733				
1919	652,775,000	549,878			
1920	732,627,478		328,600	391,500	720,100
1921	704,616,000				
1922	916,564,049				
1923	1,313,098,290	702,832	376,862	339,000	715,862
1924	1,416,315,240		496,212	450,888	947,100
1925	1,479,548,840	800,051	567,562	466,908	1,034,470
1926	1,730,861,570		567,562	566,908	1,134,470
1927	2,086,534,000		611,662	563,908	1,175,570
1928	2,245,470,000		811,927	560,688	1,372,615

(a) These figures compiled by the U. S. Bureau of Census give the growth in prime mover power installed in manufacturing plants and includes prime movers using purchased power.

PUBLIC AND OTHER UTILITY COMPANIES
POWER PLANTS, AND PLANT CAPACITIES, 1928

Company	River	Hydro	Horsepower		Total Steam	Total Steam
			Hydro	Steam		
TIDEWATER POWER COMPANY:						
Wilmington Steam Plant				15,000		
Whiteville Steam Plant				300		
						15,300
VIRGINIA ELECTRIC POWER COMPANY:						
Roanoke Rapids Hydro Plant	Roanoke River	7,800				
Roanoke Rapids Steam Plant				2,670		
Tarboro Steam Plant				2,050		
						7,800
						4,720
CAROLINA POWER AND LIGHT COMPANY:						
Goldsboro Steam Plant				1,600		
Raleigh Steam Plant				3,300		
Lockville Hydro Plant	Deep River	1,350				
Cape Fear Steam Plant				40,000		
Buckhorn Falls Hydro Plant	Cape Fear River	3,900				
Gulf Steam Plant				1,800		
Carbonton Hydro Plant	Deep River	1,350				
Blewett Falls Hydro Plant	Yadkin River	32,150				
Norwood Hydro Plant	Yadkin River	83,000				
Marshall Hydro Plant	French Broad River	4,000				
Weaver Hydro Plant	French Broad River	3,350				
Elk Mountain Steam Plant				17,500		
Waterville Hydro Plant						
(under construction)	Pigeon River	90,000*				
Miscellaneous Small Plants		2,550				
						221,650
						64,200
DUKE POWER COMPANY:						
Eno Steam Plant				34,000		
Burlington Steam Plant				700		
Reidsville Steam Plant				200		
Greensboro Steam Plant				10,000		
Mount Airy Hydro Plant	Ararat River	1,000				
Idols Hydro Plant	Yadkin River	1,800				
Buck Steam Plant				100,000		
Mountain Island Hydro Plant	Catawba River	82,400				
Mount Holly Steam Plant				50,000		
North Wilkesboro Hydro Plant		400				
Little River Hydro Plant	Upper Little River	625				
Gunpowder Creek Hydro Plant	Gunpowder Creek	500				
Rink Hydro Plant	Middle Little River	400				
Oxford Shoals Hydro Plant	Catawba River	56,000				
Lookout Shoals Hydro Plant	Catawba River	33,900				
Rhodhiss Hydro Plant	Catawba River	48,000				
Bridgewater Hydro Plant	Catawba River	35,600				
Spencer Mountain Hydro Plant	South Fork Catawba	1,000				
Tuxedo Hydro Plant	Green River	8,000				
Turner Hydro Plant	Green River	8,400				
Miscellaneous Small Plants		1,000				
						279,025
						194,900

PUBLIC AND OTHER UTILITY COMPANIES
POWER PLANTS, AND PLANT CAPACITIES, 1928—Continued

Company	River	Horsepower		
		Hydro	Steam	Total Steam
TALLASSEE POWER COMPANY:				
Falls Hydro Plant	Yadkin River	28,900		
Narrows Hydro Plant	Yadkin River	108,000		
High Rock Hydro Plant	Yadkin River	44,100		
Cheoah Hydro Plant	Little Tennessee	96,000		
Santeetlah Hydro Plant	Cheoah River	66,000		
			343,000	
MUNICIPAL:				
Plymouth Steam Plant				100
Windsor Steam Plant				210
Scotland Neck Steam Plant				1,200
Tarboro Steam Plant				2,440
Greenville Steam Plant				3,250
Washington Steam Plant				2,000
Kinston Steam Plant				3,000
New Bern Steam Plant				3,220
Morehead City Steam Plant				600
Beaufort Steam Plant				360
Rocky Mount Steam Plant				5,350
Wilson Steam Plant				6,000
Louisburg Steam Plant				300
Spring Hope Hydro Plant	Tar River	210		
Elk Park Hydro Plant	Elk Creek	250		
Bryson Hydro Plant	Oconalufy River	500		
Franklin Hydro Plant	Little Tennessee	1,500		
Highlands Hydro Plant	Cullasaja Creek	250		
Andrews Hydro Plant	Hiwassee River	1,500		
Flat River Hydro Plant	Flat River	2,500		
			6,710	28,030
RURAL AND MISCELLANEOUS COMPANIES:				
Farmville Steam Plant				700
Durham Steam Plant				3,000
University of N. C. Steam Plant				850
Boone Hydro Plant	New River (S. Fork)	300		
Shulls Mills Hydro Plant	Watauga River	380		
Buffalo Creek Hydro Plant	Buffalo Creek	200		
Newlands Hydro Plant	North Toe River	100		
Lake Lure Hydro Plant	Broad River	5,200		
Dillsboro Hydro Plant	Tuckaseegee River	200		
Murphy Hydro Plant	Nottely River	500		
Cascade Hydro Plant	Little River	500		
Lake Tahoma Hydro Plant	Buck Creek	300		
			7,680	4,550
Total Public Utility and Municipal			865,865	311,700
Add Manufacturing Plants			36,062	248,988
Grand Total, in operation or under construction December 31, 1928			901,927	560,688

COTTON, TEXTILES, RAYON

Industry	Number Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added by Manufacturer
1. All Textiles and products, 1927, final 1925 figures for "all textile products" not available.	595	123,532	\$86,145,015	\$256,887,676	\$425,437,522	\$169,549,846
(a) Clothing, Men's						
1927 Total	17	1,701	980,877	3,368,225	5,251,924	1,883,699
1925 Total	11	1,051	607,144	2,575,739	3,754,860	1,179,121
(b) Cordage and Twine						
1927 Total	9	1,456	915,094	4,113,524	6,520,058	2,406,534
1925 Total	8	1,137	646,515	4,658,202	6,306,284	1,648,082
(c) Cotton Goods						
1927 Total	374	95,786	66,149,690	184,509,360	310,299,158	125,789,798
1925 Total	364	84,139	53,939,704	207,273,861	316,068,931	108,794,970
(d) Cotton Small Wares						
1927 Total	9	161	171,694	420,960	856,515	435,555
1925 Total	5	44	43,627	143,416	255,077	111,661
(e) Dyeing and finishing						
1927 Total	16	2,545	2,228,412	13,381,416	18,996,189	5,614,773
1925 Total	10	1,294	999,703	6,006,111	8,510,852	2,504,741
(f) Gloves and Mittens						
1927 Total	4	219	91,691	393,902	612,233	218,331
1925 Total	4	222	102,828	277,275	575,431	298,156
(g) Knit Goods						
1927 Total	128	17,427	11,961,326	37,370,779	61,365,806	23,995,027
1925 Total	111	13,727	8,287,238	27,994,889	44,300,819	16,305,930
(h) Woolen Goods						
1927 Total	6	1,156	1,028,079	3,317,912	5,505,489	2,187,577
1925 Total	8	832	638,055	3,359,450	4,754,396	1,394,946

Of North Carolina's one hundred counties, sixty-one produce annually one thousand, or more, bales of cotton each and forty-five produce five thousand, or more, bales each. Converted into cash this crop represents a return to the growers of around seventy-five million dollars. The planting season begins about April twentieth and the harvesting begins about September tenth. North Carolina's past three-year cotton crop averaged annually around one million bales of lint, of four hundred and seventy-eight pounds each, plus twenty-two pounds of tare.

In production per acre this State ranks first among the important cotton producing states, and stands seventh in quantity produced, ginning 6.8 per cent of total cotton in the United States, and cutting from each seed crop some 72,000 bales of lint of 500 gross pounds each. During the preceding six years the character of North Carolina's cotton fibre and the uniformity in length of this fibre have improved to such an extent that the cotton now ranks with Western growth and is sought by the most exacting and discriminating mills.

Practically the entire crop is classed as "short staple," embracing one and one-sixteenth inch staple and below. Approximately 85 per cent of the crop runs 7/8" and 15/16" staple, and the balance one inch with a small percentage of one and one-sixteenth inch staple. The production of "long staple," or 1-1/8" and up, is small and unimportant at this time.

Markets and Schools.—North Carolina's cotton crop is not all consumed by local mills. A considerable baleage goes to the commission men and

shippers in Norfolk and to the shippers and exporters in Wilmington, N. C., and Charleston S. C., while the balance practically all goes direct to mills by motor truck and rail, brokers being practically eliminated from this latter business. Many farmers, ginners and country merchants are marketing their cotton first hand to the consuming industries. Modern warehouses, either federal licensed or state licensed or privately bonded furnishing adequate financial and storage facilities, are conveniently located throughout the cotton producing counties, eliminating excess transportation and concentration expense, as also are the eighteen hundred ginneries in the state. Sales agent and wholesalers also operate in North Carolina.

North Carolina's agricultural departments furnish grading and stapling service at nominal cost, while North Carolina State College offers collegiate instruction in this art, as well as in its textile schools. The counties furnish an agricultural agent for educational purposes and advisory services in connection with seed selection, cultivation and the use of fertilizer, but without reference to the sale of cotton.

Cotton Manufactures.—North Carolina's principal cotton manufactures are denim, damask, towels, underwear, hosiery, gray goods, variously colored goods, plush, yarns and blankets, sold largely through outside commission and financial houses.

Lint, equivalent to the State's entire production, supplemented by four hundred thousand bales, mostly inch staple, yearly imported from other states, is consumed in the State's textile output, which stands second in value in the Nation. In number of spindles North Carolina ranks second, but in active spindle hours ranks first, number of cotton mills first and spindle homes first, for the entire country.

In only fifteen states does the value of manufactures now reach one billion dollars, and in North Carolina textile products manufactures in 1927 contributed 37 per cent towards placing the State among this outstanding group.

Textile Mill Statistics.—In North Carolina on January 1, 1928, there were 215 spinning mills having a total spindleage of 2,603,350; there were 151 spinning and weaving mills having a total spindleage of 3,562,038; there were 14 spinning and knitting mills having a spindleage of 269,060, (less 46,288 spindles in two mills that spin, weave and knit). The 151 spinning and weaving mills had 90,273 looms. In addition to these looms there were 44 weaving mills having a total of 4,684 looms. The 14 spinning and knitting mills had 3,831 knitting machines. In addition to these there were 155 knitting mills that had a total of 23,429 machines. North Carolina has a little more than one-third of the total cotton textile spindleage of the South and its products are extremely varied from the coarsest and simplest counts to the finest goods made in the United States.

To summarize the textile mill situation in North Carolina on January 1, 1928, there were 579 mills having a total spindleage of 6,388,160, 94,957 looms, 27,260 knitting machines. In 1928 there have been reported as completed, or under construction some twenty-six new mills, or nearly twice as many as any other Southern State.

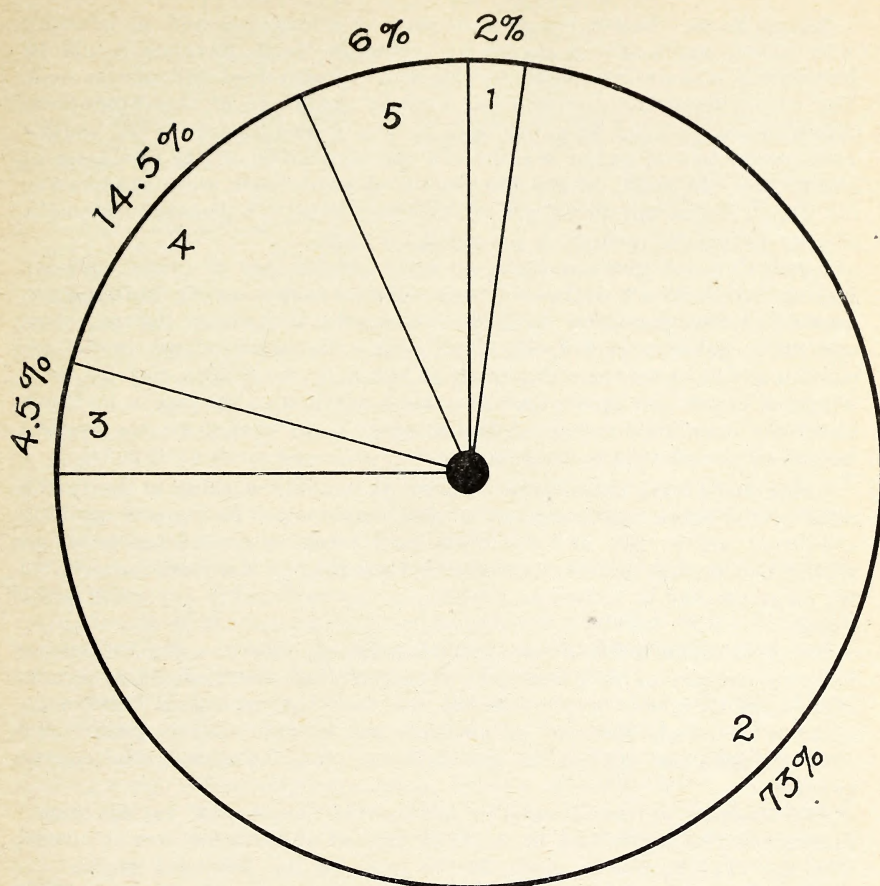


Chart for Proportion of all Textile Products in
North Carolina in 1927

INDUSTRY	VALUE	PERCENTAGE
1 Cordage and Twine	6,520,058	2. %
2 Cotton Goods	310,801,860	73. %
3 Dyeing and Finishing	19,402,448	4.5 %
4 Knit Goods	61,370,220	14.5 %
5 All Others (Including Clothing, Small Wares, Gloves, Woolens)	27,342,936	6. %
Totals	\$425,437,522	100. %

Rayon Yarn.—Rayon has now become so interwoven and so interknit with cotton yarns that a sketch of cotton in North Carolina would be incomplete without reference to this new entrant into the textile field. The cotton manufacturer who has already made use of this product of cotton linter, or wood pulp, has been proven a wise pioneer. The world's 1928 production of rayon is estimated the equivalent of 753,000 bales of cotton lint. In 1927, 75,555,439 pounds of rayon yarn were produced in the United States and the output for 1928 was 97,901,250 pounds. An output of over 130,000,000 pounds is predicted for 1929.

North Carolina now consumes an immense tonnage of rayon material, leading all Southern states. It has suitable water, cheap coal, power, unexcelled transportation facilities, wood pulp and cotton linters, labor, and many industry consumers, all of which should contribute to the expansion of the rayon manufacturing industry in the State. Several well-equipped rayon dye houses now offer their services to the public in North Carolina; one large rayon producing plant is in operation; the world's largest single plant is under construction; and others are contemplated.

Labor and Living Conditions.—There are actively working in the textile mills of the State approximately 95,000 employees. Living and working conditions are as fair and equitable as the best minds of the commonwealth can devise, and perhaps are as favorable to the manufacturer, to the employee and to society as a whole, as can be found in any state in the South.

North Carolina offers unusually favorable opportunities for the textile industry because of its climate, its transportation facilities, its power, its capital and its labor. North Carolina leads not only in capital investment, spindles operated, diversity of product, but it leads also in progressive civic thought, as applied to the industry and industrial relations in general.

The Position of the Textile in 1927.—The position of textile manufactures in North Carolina in the 1927 Census of Manufactures compared with the 1925 figures is shown in the table on the following pages.

The much feared "slump" in textiles failed to materialize in 1927, except in an 11 per cent drop in cost of raw material and power, and 1.7 per cent in total sales volume of products, indicating lower selling prices. A total of over \$425,000,000 in volume of textiles and all of their branches was produced in the State in 1927.

Statistically, 1927 showed ten more establishments reporting to the department, and the industry employed 14 per cent, or over 11,000 additional workers, with 23 per cent more wages paid them, amounting to over twelve million more dollars than in 1925. These workers added 16 per cent, or seventeen and a quarter million dollars, more value in manufacture than in the previous census, and in addition to the 95,809 wage earners in the industry, 2,477 salaried employees were paid \$6,494,211.

TOBACCO AND ITS PRODUCTS

	Number Establish- ments	Wage Earners	Wages	Materials, fuel and Power	Total Value Products	Value Added by Manufacturer
Tobacco products:						
1927 Total N.C.	20	15,973	\$12,544,173	\$124,711,961	\$413,271,612	\$288,559,651
1925 Total N.C.	21	15,715	12,000,215	113,395,726	343,075,607	129,679,781
(a) Cigars and cigarettes						
1927 Total N.C.	14	14,081	11,582,745	117,565,177	392,050,130	274,484,953
1925 Total N.C.	12	13,133	10,533,415	104,587,162	312,736,113	108,148,951
(b) Chewing, smoking and snuff						
1927 Total N.C.	6	1,892	961,428	7,146,784	21,221,482	14,074,698
1925 Total N.C.	9	2,582	1,466,800	8,808,664	30,339,494	21,530,830

Figures on tobacco grown and manufactured in North Carolina for 1927, are far beyond any former record of even this great tobacco State. The value of the raw tobacco, \$111,550,000 was greater than any other crop grown in North Carolina, as well as the combined tobacco crop of the three nearest competing states. The extent of the State's tobacco manufacturing industry can be partially appreciated when we know that its total, \$413,271,000, was nearly two and three-quarter times the value of the raw tobacco, and the products by manufacture were in excess of of the total value of the combined agricultural products, timber, minerals and fisheries products of North Carolina in 1927.

Following are facts and figures about tobacco and tobacco manufacture in the State:

One-fourth of the tobacco crop of America is produced on the farms of North Carolina. North Carolina tobacco factories manufacture more tobacco products than any other section in the world.

In 1927 there were raised on the tobacco farms of this State 485,000,000 pounds, which represented to the grower a cash value, averaged at 23 cents a pound, of \$111,550,000. This exceeded the next ranking crop, cotton and cottonseed, by over \$13,000,000.

Markets for Tobacco.—Inasmuch as certain types of North Carolina grown tobacco are suitable for foreign tobacco manufactured products, a considerable quantity of the leaf is exported. North Carolina manufacturers have developed a market of no mean importance for their products in foreign countries, and in the international tobacco world this State occupies an outstanding position.

From an economic standpoint the tobacco industry is worthy of special mention. It represents an even balance between commerce and industry in that the farmer has already at hand an unfailing market for his product, thus obviating a long haul to market and having consequently saving in the cost of distribution, while the North Carolina manufacturer has his materials close at hand.

The leaf tobacco is sold by the farmer to the manufacturer or dealer through some 44 tobacco markets, in which 148 warehouses are operated. The grower hauls the leaf to one of these markets, over the splendid system of North Carolina highways, and delivers it at the warehouse where it is weighed and tagged. The manufacturers and dealers bid, on a competitive basis, upon each pile of tobacco and the grower is paid for same by the warehouse cashier. Type or grade and demand are the controlling factors in the price paid for the leaf.

Tobacco Industries.—For the year of 1927, the tobacco industries produced \$413,271,612 worth of finished product, involving in the process the employment of about 16,000 wage earners in the twenty factories in the State. The increase for the two-year period amounted to over \$80,000,000 in cigars and cigarettes.

The major tobacco product of North Carolina is cigarettes. Available statistics indicate that there is one tobacco center in North Carolina which makes more cigarettes than any other city in the world. The growth of this phase of the industry has been little short of phenomenal.

Smoking and chewing tobaccos come next in volume of production. There are several plants in which snuff is made. These classes of tobacco products shows a decrease in production in the 1927 census. Some cigars are also manufactured in the State. The principal tobacco manufacturing centers in North Carolina are located at Winston-Salem, Durham and Reidsville.

Viewing the industry from a national angle, it represents quite a factor in the internal revenue receipts of the United States Government. During the last fiscal year the Government collected in North Carolina \$225,315,303.53, which represents more than five percent of the entire nation's internal revenue collected from all sources. More than \$6,000,000 per annum, in custom charges, are paid by the tobacco industry on goods and commodities shipped into North Carolina from foreign countries.

Census Figures on the Industry, in 1927.—Nearly a thousand wage earners were added to the 1925 figures in the cigarette branch of the industry, with an increase of wages paid them of over one million dollars, while about thirteen million dollars more was paid out for material and power, and one hundred sixty million dollars more was added in value by manufacture in 1927.

The chewing and smoking tobacco division showed a decrease of around one-third in number of establishments reporting, amount of wages paid and value added by manufacture. It also showed a decrease of 25 per cent in wage earners, 20 per cent expenditures for material and 30 per cent loss in value of products produced. The division of cigars and cigarettes showed a percentage of consistent increase, with 25 per cent more establishments reporting and the same percentage of increase in total value of products, 12 per cent more was paid for material, 10 per cent for wages and there were 7 per cent more wage earners employed. The analysis as to effectiveness of manufacture and management of the latter in profitable production is shown by the value added by manufacture, being 160 per cent more in 1927 than the total value added in 1925. In addition to the large number of wage earners, and wages paid them, the cigar and cigarette industry also employed over four thousand salaried employees to whom were paid over seven and one-half million dollars.

FURNITURE INDUSTRY

	Number Establish- ments	Wage Earners	Wages	Materials, Fuel and Power	Total Value Products	Value Added by Manufacture
Furniture						
1927 Total N.C.	143	14,821	\$12,417,590	\$27,702,378	\$53,551,221	\$25,848,843
1925 Total N.C.	127	13,567	10,752,977	24,944,903	51,208,238	26,263,335

The manufacture of furniture began in North Carolina about 1888. It started as a natural result of the great hardwood resources of the State. For years little that went into the manufacture of the finished product had to be imported. As time passed this rapidly growing industry began to reach out into other fields for materials while, at the same time, the sale of Southern-made furniture was spreading into far-away territories and the State was becoming known throughout the United States as a furniture center.

Until recently the general public has not realized that one of the most important industries of the South is the furniture industry, which, in North Carolina, ranks third in capital invested, the number of wage earners, the wages and salaries paid, the value of the product and the value added by manufacture, being excelled only by the textiles and tobacco manufacturing industries.

Reasons for Growth.—The growth of the Southern furniture industry has been steady, due to progressive policies pursued by a small group of far-seeing men. An intensive study of manufacturing processes, accompanied by a vast amount of research work, a study of designing, a careful gauging of public tastes, and the quantity production of goods by native-born white labor, have been contributing factors of the continued growth of the industry. The public today seeks good, medium-priced merchandise. Southern manufacturers, concentrating production on this class of merchandise, are able to produce excellent furniture, closely following the period designs, at a price within reach of the average home furnisher. They are building better furniture to-day than ever before. Furniture dealers throughout the country, who once looked upon Southern furniture as inferior, are now turning to Southern markets for their better grade goods.

Probably the outstanding feature of the development of furniture manufacturing in the South has been the great improvement in the quality of goods. In the early days, almost without exception, the very cheapest grades of furniture were produced in the South and termed "plunder" by the older manufacturing centers. Such marked progress has been made in the skill of the furniture workers that to-day the quality of furniture produced in the South is equal to that produced in any other.

The quantity of furniture manufactured in North Carolina is much greater than is indicated by the census figures based upon total in value, for the reason that the average value per suite of furniture produced in North Carolina is less than for Michigan and states making a greater proportion of the high-priced furniture. The production of furniture in North Carolina is greater than was the production for the entire South for 1913, which illustrates the rapid growth of this industry.

Production.—According to the 1927 Census North Carolina leads the United States in the production of wooden bedroom and dining room furniture. Bedroom furniture production was \$26,523,852, or 18.22% of the total, 34½% more than in Michigan, the second state. Diningroom furniture production was \$14,404,116 or 13¾% of the United States, 14% more than Michigan. North Carolina ranked second in kitchen furniture, exceeded only by Indiana.

In wooden household furniture, North Carolina production for 1927 was 5.91% greater than in 1925, against increase for the United States of 1.92%. Dining room furniture production in North Carolina for 1927 over 1925, increased 17.86%, whereas the United States declined 1.34%.

Manufacturing Trend.—The trend is towards larger manufacturing units. The 1927 figures for the whole country show that the average furniture factory in North Carolina employs more men and produces more goods than the average factory for the country as a whole. This trend towards larger units is brought about by the increased cost of equipment, the necessity for quantity production and selling, and the low unit margin of profit in manufacturing. On account of this condition, which is more or less general in all industries, the larger and more efficient units are usually the most successful.

The trend of the furniture manufacturing southward will continue. The close proximity to the large consuming markets of the East, the climatic conditions, the splendid living conditions, the availability of skilled furniture workers and other favorable conditions are causing manufacturers of other sections to consider the advisability of locating factories in North Carolina.

Allied Industries.—As a result of the location of the furniture business in North Carolina, numerous industries making allied products have located in the state. There are a number of mirror manufacturing plants which came to North Carolina on account of the furniture industry. The first of these mirror plants was located in High Point about twenty-three years ago. There are also plants at Winston-Salem, Statesville and Lenoir.

The veneer and ply wood business has also greatly expanded in the State, due to the demands for this product by furniture factories. These factories are not only making veneer and ply wood for consumption by the furniture factories, but are making products used by coffin factories, box manufacturers, and various other industries.

Opportunities.—Numerous other supplies used in the furniture and wood working industries should be manufactured in North Carolina. For example, large quantities of hardware, such as locks, hinges, catches, trimmings, etc., are used by the furniture industry. There is not a single manufacturer of cabinet or builders' hardware located south of the Ohio or Potomac Rivers. There is no reason why these various items of hardware could not be manufactured profitably in North Carolina for distribution throughout the South.

Another line that might be manufactured in North Carolina is rugs and floor coverings. The same dealers who visit the High Point Exposition to buy furniture also buy large quantities of rugs and floor coverings. There is an opportunity for manufacturing this commodity in North Carolina.

Furniture Distribution.—In the distribution of furniture all over the country less than one-half is sold at home. The distribution of Southern-made furniture is nation-wide, the East and the West being large consumers, and in addition to the domestic markets, considerable Southern furniture is sold in Cuba, Canada and Mexico.

For many years the Southern manufacturers realized that the industry was being handicapped by the necessity of marketing their products at

the expositions held elsewhere. This situation resulted in the erection of the Southern Furniture Exposition Building, located at High Point, North Carolina, until recently the largest single furniture exposition building in the world. It cost \$1,200,000 and contains 208,000 square feet of exhibition space distributed over ten floors. The various southern furniture manufacturers exhibit their goods throughout the year in this building, making it possible for the dealer in furniture to visit it at any time and make purchases from the samples on display in the building. The semi-annual furniture shows, held in January and July, are visited by hundreds of buyers throughout the nation who purchase their stocks at these periods. Approximately 1,500 furniture dealers attend each show, and a large number visit the market between seasons. This market is to-day recognized as one of the leading furniture centers, and all classes and kinds of Southern-made furniture are exhibited.

Furniture Statistics.—The continued rapid growth of the furniture industry of the South is indicated by the complete statistics issued by the Interstate Commerce Commission, covering carload traffic handled by the railroads for the year 1927, which shows that the furniture shipments of the South continue to increase, and indicate a greater increase in movement from the South than from any other section.

Carloading Statistics.—The following statement shows the number of carloads of furniture originated in each of the three districts for the past seven years:

District	1921	1922	1923	1924	1925	1926	1927
Eastern	26,656	35,182	44,870	42,625	48,438	50,157	49,503
Southern	8,986	15,387	23,097	24,878	32,893	36,582	37,363
Western	17,570	25,157	30,497	26,718	28,839	28,930	30,573
United States	53,212	75,726	98,462	94,221	110,170	115,669	117,439

Note: The Eastern District includes railroads north of the Ohio and Potomac rivers and east of the Mississippi river. The Southern district comprises lines south of the Ohio and Potomac rivers and east of the Mississippi river. The Western District comprises all lines west of the Mississippi river.

The following statement shows the extent of the increase in the three districts for 1927 over 1921, 1922 and 1926:

Increase for 1927 over	1921	1922	1926
Eastern District	85.7%	40.7%	*1.1%
Southern District	315.7%	142.8%	2.1%
Western	74. %	21.5%	5.7%
United States	120.7%	55.1%	1.5%
*Decrease			

It will be noted that the increase for the Southern District for 1927 over 1926 was 2.1 per cent, compared with an increase for the country, as a whole, of 1.5 per cent. It will further be noted that there was a decrease in the number of cars originated in the Eastern District of 1.1 per cent.

The following statement shows the percentage of the total business originated in each of the districts for the past several years:

	1921	1922	1924	1926	1927
Eastern District	50.1%	46.4%	45.2%	43.3%	42.2%
Southern District	16.9%	20.3%	26.4%	31.7%	31.8%
Western District	33. %	33.3%	28.4%	25.0%	26.0%

It will be noted that the Southern District originated nearly one-third of the total carload furniture traffic for 1927, whereas in 1921 the South originated about one-sixth of the total furniture traffic.

These statistics do not take into consideration the amount of business originated by the small railroads. One of the short lines operating from several Southern furniture manufacturing points last year originated approximately 3,000 cars of furniture, which would indicate that the increase in Southern business was more than shown by the above statement.

Southern Furniture Success.—Obviously, the furniture industry of the South is growing more rapidly than in any other section or in the country as a whole. The large buyers are realizing that to meet the demands for well-made, medium-priced and profitable merchandise, they must look to the factories of the South, which through mass production, are in position to supply the demands.

**CENSUS OF FURNITURE FACTORIES FOR NORTH CAROLINA
1927 COMPARED WITH 1923 AND 1925**

	1923	Per cent	1925	Per cent	1927	Per cent	Percent of Increases over	
							1923	1925
Number of establishments	113		127		143		23.5%	12.6%
Salaried Employees	619		786		820		32.5%	4.3%
Wage Earners	10,927		13,567		14,821		35.6%	9.2%
Wages	\$ 8,630,137	21.3%	\$10,752,977	20.9%	\$12,417,590	23.2%	44.1%	15.7%
Salaries	1,782,615	4.4%	2,209,506	4.4%	2,371,122	4.4%	33.0%	7.3%
Material	20,323,324	50.8%	24,944,903	48.7%	27,702,378	51.8%	33.5%	11.0%
Total of salaries, wages and materials	30,736,076	76.5%	37,907,386	74.0%	42,512,690	79.4%	38.3%	12.1%
Total value of products	40,072,577	100.0%	51,208,238	100.0%	53,551,221	100.0%	33.6%	4.6%
†Value added by manufacture	19,749,253	50.1%	26,263,335	51.3%	25,848,843	48.2%	30.9%*	-1.6%
‡Profit, sales expense, overhead (salaries excepted)	9,336,501	23.5%	13,300,852	26.0%	11,038,531	20.6%	17.8%*	-12.4%
†Difference between material cost and total value includes wages, salaries, profit and overhead.								
‡Value added by manufacture, less wages and salaries, which leaves profit, overhead and sales expense.								
% Percentage of value of products.								
*Decrease.								

Note: Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request.

Economic Paper No. 57, price 50 cents, Economic Development of the Furniture Industry of the South.

WATER PRODUCTS; FISH AND SHELLFISH

Food Value of Fish.—An eminent authority says, "The majority of people consume only a small per cent of the quantity of fresh fish and oysters that they should. In these times when every family, both in town and country, is a large consumer of canned goods, it is more important than ever before that there should be an increase in the quantity of shellfish, in season, and fresh fish on every table.

"Oysters and fish, especially the salt water fish, contain large amounts of mineral matter, especially iodine, a certain amount of which is necessary for every person in order to maintain good health. These foods

are all, when properly prepared, easily digestible. Ordinarily they are not expensive, and the average householder should find it an easy matter to increase the present ratio of consumption of these foods.

"There are no finer fish or other sea-food than the product obtained in the coastal waters of eastern North Carolina. These areas are free from sewage disposal from large cities and, from a health standpoint, are probably as safe and desirable as any such products found anywhere in the world."

North Carolina has been endowed with a great variety and abundance of water life. The total value of fish taken from North Carolina waters in 1927 is in excess of two and a half million dollars. Food fish production amounted to more than twenty million pounds, valued at over one and one-half million dollars, and shellfish in excess of one million dollars. Menhaden fish for fish oil and fertilizer amounted to about three hundred and forty thousand dollars. Plants, boats, nets and other equipment used in handling, manufacturing, and marketing of fish and fish products are valued at around three and three-quarter million dollars.

Approximately 15,000 persons are engaged in fishing activities incident to the production and marketing of the seafoods in North Carolina; and a population of around 50,000 is estimated to be dependent upon the industry for a livelihood, including those engaged in canning fish and by-products.

Commercial Fishing Grounds.—The coast of North Carolina furnishes practically a double line of fishing grounds, extending for a distance of three hundred miles from the Virginia line to South Carolina.

They are classed as "inside" and "outside." Those of the numerous sounds and mouths of large rivers are the "inside" grounds, roughly consisting of, approximately, three thousand square miles, and the "outside" are ocean waters. These physical conditions have an important influence on the abundance and variety of commercial fish in North Carolina coastal waters.

The largest of the North Carolina sounds are: Currituck, Albemarle, Roanoke, Croatan, Pamlico, Core, Bogue. Large rivers such as Chowan, Roanoke, Pamlico, Alligator, Neuse, and Cape Fear are well known as spawning grounds for white shad. The Chowan is reputed to be the greatest spawning ground for shad in this country.

Currituck, the most northern of the North Carolina sounds, is a large fresh-water body and has no direct outlet to the sea. Black bass, perch, and striped bass are found in abundance in the sound.

Albermarle sound is credited with being the largest coastal body of fresh water in the world, covering an area of, approximately, four hundred and fifty square miles. Eight rivers empty into the sound and provide favorable spawning grounds for white shad and striped (rock) bass,—probably the best along the Atlantic coast.

Roanoke and Croatan sounds, parallel to the coast and separated by historic Roanoke Island, form a natural passage between the larger Albermarle and Pamlico Sounds. Croatan, being the natural passage between Pamlico and Albemarle, is considered one of the best fishing grounds in the State. It is said that its bottom is more valuable than the same area of some of the best farming lands.

Pamlico is the largest sound on the Atlantic coast, except Long Island. Migratory fish use the sound as a passage to their spawning grounds and it also contains large quantities of mullet, spot, croaker, drum, bluefish, sheephead, and hog fish. Much of the bottoms of this sound are covered with the finest quality of oysters.

Core and Bogue Sounds are the farthest south of the larger coastal bodies of water, and both are shallow and have good haul-net fishing. Bogue Sound is especially noted for the number of scallops, the yield often running as high as \$200,000 in value annually.

South of Bogue Sound, the coast is fringed, virtually the entire distance to the South Carolina shore, with small sounds such as Bear, Brown, Stump, Topsail, Myrtle Grove and Wrightsville, which furnish a considerable supply of fin and shellfish for the market. The large mouths of such rivers as the Chowan, Roanoke, Perquimans, Pamlico, Neuse, New and Caps Fear are among the most important waters for commercial fishing.

Classification of Water Products.—The fishing industry of North Carolina may be divided into several classes; the food fish—both shell and other fish—and the menhaden fish, made into fish oil and fertilizer. The figures covering the various branches of the fishing industry are included in tables following.

In returns to the fishermen, the food fishing is the more important; during 1927 it showed a value of nearly one and one-half millions of dollars and a total production of over twenty million pounds of food fish, which was a large increase over the previous period.

The largest poundage of fish yield was the croakers, 4,697,367 pounds, valued at \$99,444.51, and the next largest catch was herring with 4,020,688 pounds, valued at \$116,253.99. Trout came third with a total yield of 3,835,449 pounds, which returned \$293,457.91, and 1,708,857 pounds of mullet which brought to the fishermen \$91,248.11.

Shad was the most important catch in value, amounting to \$551,836.78 in 1927 from a total poundage of 2,221,920; a revenue of almost double that of any other food fish.

The menhaden, or fatback, is the principal fish product of North Carolina waters for manufacturing purposes, being made into fish oil and fertilizer and is of great commercial value, and its importance is increasing as the uses of its products grow.

The licensed fishermen reported a total of 169,902,000 menhaden caught in 1927, bringing a return of \$330,804. Oil produced from the fish amounted to upwards of \$2,000,000 and value of scrap, around \$1,000,000.

The following figures give the complete list of the weight and of the product of the fisheries of North Carolina for 1927, exclusive of shellfish and menhaden.

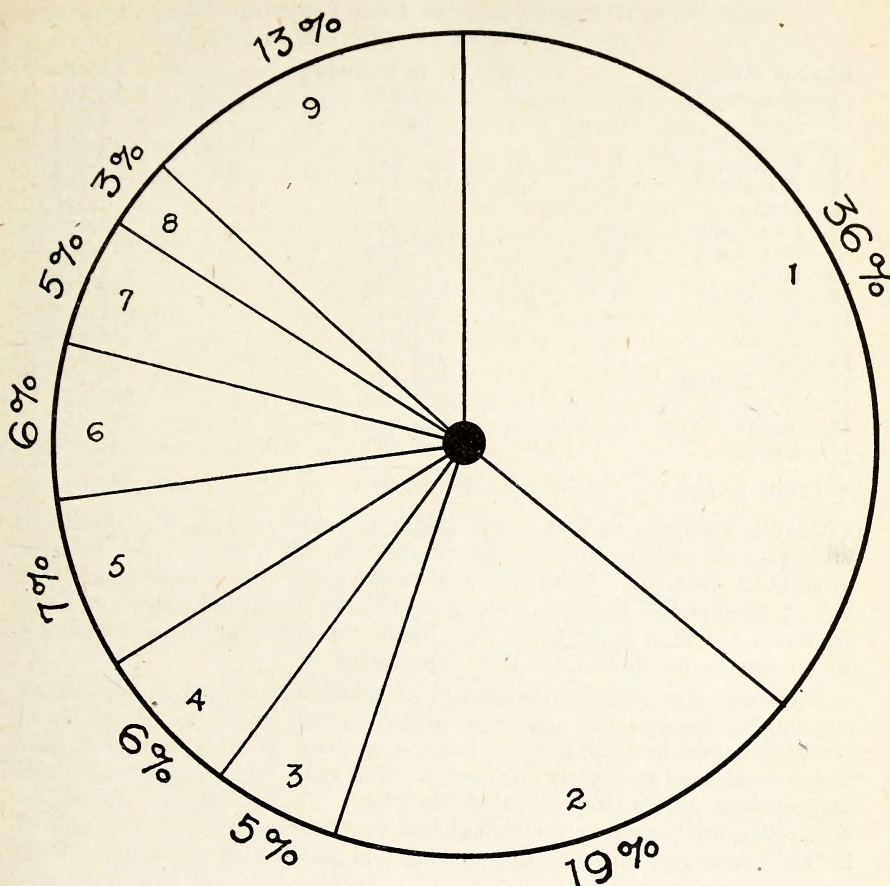


Chart for Proportion of Fish Catch in
North Carolina in 1927

INDUSTRY	VALUE	PERCENTAGE
1 Shad	\$551,836.78	36%
2 Trout	293,457.91	19%
3 Blue Fish	71,301.38	5%
4 Croakers	99,444.51	6%
5 Herring	116,253.99	7%
6 Mulletts	94,248.11	6%
7 Rock	76,243.76	5%
8 Mackerel	42,574.34	3%
9 All Others	202,710.36	13%
Totals	\$1,545,071.14	100%

KIND, QUANTITY AND VALUE OF FISH TAKEN IN WATERS OF
NORTH CAROLINA IN 1927

Kind of Fish	Weight in Pounds	Value
1—Assorted	637,812	\$ 33,503.51
2—Bass	41,611	7,018.47
3—Blue Fish	837,056	71,301.38
4—Butters	581,681	30,551.32
5—Croakers	4,697,367	99,444.51
6—Drum	137,999	7,520.67
7—Flounders	191,664	19,007.78
8—Herring	4,020,688	116,253.99
9—Jack	104,462	7,562.01
10—Mackerel	383,997	42,574.34
11—Mullet	1,708,857	91,248.11
12—Perch	251,288	18,899.29
13—Rock	467,766	76,243.76
14—Sea Mullet	708,487	36,157.36
15—Shad	2,221,920	551,836.78
16—Trout	3,835,449	293,457.91
17—Others	346,287	42,489.95
Totals	20,247,335	\$1,545,071.14

County Statistics on Fish.—The origin of water products by counties is important in locating the district from which the bulk of each class of product is obtained. The following table gives this information. The list of commercial fisheries establishments, by counties, cities and class in North Carolina is given in the North Carolina Industrial Directory, which can be obtained from this Department.

Shellfish.—The growing importance of shellfish as a food is emphasized, not only by the fact that over one million dollars' worth was produced in North Carolina in 1927 but the importance now of the classes that used to be considered as merely incidental. Not very many years back clams and oysters pretty well covered shellfish. The output in dollars of North Carolina's various shellfish shows that "diversification" has arrived in this industry as in the manufacturing and farming of the State. While oysters reached the handsome total of over \$156,000, yet soft-crabs and crab meat nearly equalled this sum, with more than \$153,000 output. Shrimps, with \$64,358, outdistanced the \$48,724 total for clams, and scallops topped them all with nearly \$242,000 in value, which exceeded that of both oysters and clams, combined.

The following table shows the totals in pounds and dollars of the shellfish catch in 1927 and in what North Carolina counties they were taken.

SHELLFISH AND MENHADEN TAKEN IN COUNTIES OF NORTH CAROLINA IN 1927
AND TOTALS IN POUNDS AND VALUE IN DOLLARS

County	Bushels Clams	Dozens Soft Crabs	Gallons Crab Meat	Gallons Escallops	Bushels Oysters	Pounds Shrimps	Number Menhaden
Beaufort			6,305		85,788		
Brunswick	1,356					364,076	56,000,000
Carteret	17,870	79,554	3,248	119,535	73,228	64,980	108,412,000
Craven				1,217	13,167		
Currituck			1,000				
Dare	136		14,027	188	1,709		
Hyde					31,260		
New Hanover	5,000				3,084		5,490,000
Onslow					1,462		
Pamlico					101,369		
Pasquotank					243		
Pender					1,178		
Total Units	24,352	79,554	24,580	120,490	312,488	429,056	169,902,000
Value, approximate	\$48,724	\$79,554	\$73,740	\$241,880	\$156,244	\$64,358	\$339,804
Value all shellfish	\$1,004,304						

In the oyster industry in North Carolina the consuming public is given the assurance that it is getting shellfish from approved beds only, and that the product is handled and shipped under the best of sanitary conditions. Bacteriological examinations are made on the shellfish beds, the water is tested with care, the houses where these foods are handled assure cleanliness, and the finished products of the plants are examined to give the final assurance to the consumer.

The water used in the plants is examined with the same degree of care, the food handlers are given a strict medical examination, and lastly, the shellfish on the markets are inspected by the State Board of Health and by officials of the State Dairy and Food Inspectors' Association.

State Fisheries Patrol Fleet.—For the work of collecting licenses, enforcing regulations, studying the condition of the industry, and maintaining a general supervision over the fishing waters of the State, a fleet of seven vessels is provided for the Commissioner and his assistants, who handle these broad operations in a very effective manner.

Game Fishing.—North Carolina coastal waters furnish sport for thousands. Outside, deep sea fishing, is mostly done from the ports of Beaufort, Morehead City, Wilmington, and Southport, while most of the coastwise towns including New Bern, Washington, Edenton, Elizabeth City and a number of others are headquarters for large numbers of "inside" game fishermen.

Probably the most spectacular and popular of salt water game fishing is for channel bass, which is caught in large numbers along the "banks" near the inlets for which Ocracoke and Hatteras are especially well known.

Among the most popular of the fishes caught in the outside waters are some of the game fish such as the Spanish mackerel. Others taken in large numbers on the coastal fishing grounds include the bluefish, sheepshead, trout, and rock or striped bass.

Inland Fisheries.—Natural reproduction has long since ceased to furnish game fish in sufficient numbers to provide a satisfactory amount of sport for the out-of-doors lovers, who find their principal diversion in the forests and along the streams, as well as those who angle for food

FISH TAKEN BY COUNTIES OF NORTH CAROLINA, BY WEIGHT AND VALUE

County	Trout		Sea Mullet		Blue Fish		Mullet		Croakers	
	Number Lbs.	Amount \$	Number Lbs.	Amount \$	Number Lbs.	Amount \$	Number Lbs.	Amount \$	Number Lbs.	Amount \$
Beaufort	1,263,220	\$101,057.60			52,487	\$4,789.56	14,705	\$1,887.00	429,124	\$9,378.64
Bertie										
Brunswick			9,082	793.04	23,246	1,626.24	70,821	2,124.66		
Carteret	1,109,440	90,124.64	580,357	27,391.23	496,867	38,296.18	1,095,046	54,657.00	3,129,726	65,122.78
Chowan										
Craven										
Curtituck	373,094	30,259.00	37,843	1,791.39	44,556	4,599.40	69,326	5,060.77	466,031	10,566.41
Dare	30,050	2,517.17	70,802	936.70	17,150	1,715.00	219	10.93	6,420	131.32
Martin										
New Hanover	175,250	12,017.50	2,625	105.00	112,500	11,250.00	365,000	18,300.00	75,000	1,500.00
Onslow	1,650	165.00					33,450	3,345.00		
Pamlico	256,245	1,492.00			17,750	1,775.00	38,290	3,827.50	419,966	7,405.36
Pasquotank	625,500	55,825.00	17,500	4,640.00	72,500	7,250.00	22,000	2,035.25	171,100	5,340.00
Perquimans										
Tyrrell										
Washington										
Total	3,835,449	\$293,457.91	708,487	\$36,157.36	837,056	\$71,301.38	1,708,857	\$91,248.11	4,697,367	\$99,441.51
County	Spots		Mackerel		Shad		Herring		Perch	
	Number Lbs.	Amount \$	Number Lbs.	Amount \$	Number Lbs.	Amount \$	Number Lbs.	Amount \$	Number Lbs.	Amount \$
Beaufort	31,362	\$492.25	13,336	\$1,336.65	108,604	\$27,150.00	380,392	\$7,397.40	42,775	\$2,755.16
Bertie					87,809	21,952.50	347,500	5,212.50		
Brunswick	615,701	18,354.50	287,467	28,746.67	34,010	8,502.50	42,205	1,331.60	37,500	2,925.00
Carteret					37,500	9,375.00	675,000	9,875.00		
Chowan	54,687	1,786.23	15,830	1,579.52	60,668	17,139.63	48,329	580.53	13,332	920.42
Craven							708	14.45	21,142	932.31
Curtituck									2,519	112.40
Dare	14,995	281.30	614	56.50	1,505,480	376,000.00	46,723	702.76		
Martin					30,000	7,500.00	600,000	24,000.00		
New Hanover	120,000	6,125.00	1,250	125.00	54,500	13,625.00	40,000	800.00		
Onslow							110,000	2,100.00		
Pamlico	50,100	1,002.00	7,500	750.00	26,264	7,077.90	9,856	1,978.25	129,400	10,619.00
Pasquotank	69,250	1,382.50	58,000	9,980.00	215,700	48,168.00	177,750	10,394.00		
Perquimans					12,500	3,125.00	125,000	15,625.00		
Tyrrell					36,000	9,000.00	219,975	4,695.00	2,870	372.50
Washington					12,885	3,221.25	1,197,250	31,547.50	1,750	282.50
Total	956,095	\$29,423.78	838,997	\$42,574.34	2,221,920	\$551,836.78	4,020,688	\$116,253.99	251,288	\$18,899.29

FISH TAKEN BY COUNTIES OF NORTH CAROLINA, BY WEIGHT AND VALUE—Cont.

County	Bass		Rock		Drum		Jack		Flounders	
	Number Lbs.	Amount \$	Number Lbs.	Amount	Number Lbs.	Amount	Number Lbs.	Amount	Number Lbs.	Amount
Beaufort	395	3.94	30,200	\$3,500.40	26,319	\$1,113.40	18,672	\$1,256.37	26,925	\$1,763.04
Bertie			4,500	675.00						
Brunswick	1,000	100.00	63,250	6,950.00	21,150	547.50			4,675	243.50
Carteret										
Chowan										
Craven	799	138.90	2,156	709.06	7,630	302.85	15,089	840.60	924	86.03
Currituck	14,639	3,155.04	1,450	238.10						
Dare	1,528	220.59	5,796	700.83	400	16.92	8,076	282.29		
Martin										
New Hanover	12,500	1,250.00							10,250	801.00
Onslow										
Pamlico			1,392	208.87			17,625	732.75	10,390	829.20
Pasquotank	10,750	2,150.00	344,050	60,257.00	82,500	5,540.00	45,000	- 4,450.00	138,500	15,285.00
Perquimans										
Tyrell										
Washington			14,972	3,004.50						
Total	41,611	\$7,018.47	467,766	\$76,203.76	137,999	\$7,520.67	104,462	\$7,562.01	191,664	\$19,007.78
County	Butters		Assorted		Others		Total		Total	
Beaufort	Number Lbs.	Amount	Number Lbs.	Amount	Number Lbs.	Amount	Number Lbs.	Amount	Number Lbs.	Amount
Bertie	102,060	\$3,216.60			118,706	\$3,338.22	2,659,302	\$170,526.24	439,809	27,840.00
Brunswick	52,625	2,175.00	437,750	21,887.50	79,800	2,917.00	303,149	4,543.94		
Carteret					102,100	3,640.75	8,111,584	371,496.35		
Chowan							712,500	19,250.00		
Craven	123,861	3,778.63			21,751	500.60	1,355,906	80,639.97		
Currituck			57,739	2,704.34	64,462	3,471.60	160,140	10,515.84		
Dare	143	2.86			8,033	425.00	1,655,226	384,112.57		
Martin							630,000	31,500.00		
New Hanover					11,500	650.00	980,375	66,548.50		
Onslow							145,100	5,610.00		
Pamlico	7,392	492.23					862,770	27,571.06		
Pasquotank	295,600	20,886.00					2,530,100	264,201.75		
Perquimans			115,000	6,520.00			252,500	25,270.00		
Tyrell			27,323	2,391.67	13,500	675.00	299,668	17,134.17		
Washington					5,500	275.00	1,232,357	38,310.75		
Total	581,681	\$30,551.32	637,812	\$33,503.51	425,352	\$15,893.17	22,130,486	\$1,545,071.14		

purposes. North Carolina, through the Department of Conservation is carrying on a definite program of stocking her streams and numerous other fishing waters with millions of fingerlings raised in State hatcheries.

State hatcheries and their locations are: Frank Stedman hatchery, Cumberland County; Pete Murphy hatchery, McDowell County; Morrison hatchery, Haywood County; Boone hatchery, Wataugua County; Roaring Gap hatchery, Alleghany County; and Lake James hatchery, Burke County. The cost of construction of the six hatcheries was approximately \$125,000. From the first year's operation of the hatcheries there was an output of brook trout, 430,700; rainbow trout, 35,660; large-mouth bass, 203,900. In 1928 the number was increased to the following: Brook trout, 1,806,238; rainbow trout, 86,279; large-mouth bass, 387,250; crappie, 15,135; yellow perch, 1,538; rock, 7,230,750; sun fish, 16,000; brown trout, 18,000, and blue bream, 44,775.

Angler's Law.—The most important legislation dealing with game fishing in North Carolina placed upon the statute books by the General Assembly of 1927, was an act requiring a license to be taken out by those using rod and reel or jointed poles for fishing in the public fresh waters of the State. (New law in effect, inquire of department).

Although the State has made an impressive start in the work of restocking her streams with game fish, there is still a broad field for expansion as means are furnished with which to enlarge the program. The Angler's License Law from which \$17,000 was collected in 1927, will help in furnishing necessary funds with which to carry out a broadened program of protection and propagation, both of which are necessary to achieve the best results.

Note:—Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Fishing in North Carolina; Biennial Report of Fisheries Commissioner, 1927-1928.

RESORTS, RECREATION, GAME AND FISH

Among the most valuable industries of the State of North Carolina are her resorts, recreational, and wild life facilities which, for variety and scope, are equalled by few states.

The resort facilities suggest an empire with terrain, climate, and conditions sufficiently diversified to suit every taste and individual demand.

On the east, the surf of the Atlantic marks the entire Carolina shore. Extending inland, the surface of the State may be likened to an inclined plane which gradually rises from the sea-level until it reaches into the clouds surmounting the summit of Eastern America. Between these two extremes virtually every variety of topography is afforded, from the lofty mountains to the sandy shores.

Without leaving her borders, residents of North Carolina find as great a degree of change in climate and topography as may be found elsewhere in a trip covering thousands of miles. Within the span of one sun across the horizon the seaside dweller can motor to the mountain region, obtaining a complete change in scenery and surroundings; and, likewise, the mountaineer may experience equal diversity by traveling in the opposite direction.

Famous winter and summer resorts, with their attendant variation in climate, place North Carolina in a distinctive class to attract visitors. The

Influx of seekers, after health and recreation, pouring into North Carolina is a continuous pilgrimage that knows no slack period, every season in the year offering its lure to these visitors.

Mountain Resorts.—Extending across the entire western part of the State from Virginia to the Georgia line, North Carolina mountains are widely known for their charm of setting and their natural beauty. Two score peaks rear their heads skyward to a height of more than a mile and numbers of others approach these in loftiness. The Appalachian scenic highway, which extends across the State, is one of the most beautiful in the United States.

Virtually the entire mountain section is a summer resort area with thousands of cottages extending into its innermost recesses. To name every section would be next to impossible, but many have been developed to such an extent that they are known the country over and enjoy each season a large influx of visitors.

The popularity of the mountain section is greatly enhanced for health resorts by the large number of mineral springs containing iron, magnesium, and other minerals. Recent discovery of radio-active properties in some of the springs with acknowledged healing qualities, has added another attraction to the section.

The establishment of the Great Smoky Mountain National Park, now assured through gifts of the Laura Spellman Rockefeller Foundation and other individuals added to the bond issues of the States of North Carolina and Tennessee, has fixed public attention on this region. Naturalists and beauty lovers find the Great Smokies to contain the greatest area of virgin timber in Eastern American mountains whose magnificence and charm cast a spell over the visitor.

North Carolina is fortunate in having almost 400,000 acres in National Forest lands, which include some of the finest scenery of the mountains. These areas are administered for the benefit of the public and, under certain restrictions of the U. S. Forest Service, are always open for the enjoyment of visitors. They are, in effect, natural playgrounds open for the enjoyment of the whole country.

The reservations include the Pisgah, Nantahala and Unaka National forests, all in mountain section of the state. Appropriations have been made by the Federal congress providing funds for a national forest in the pine lands of eastern North Carolina.

Coast Region.—North Carolina's coast line, of approximately 300 miles, furnishes unlimited opportunities for recreation and sport. Her watering places are rendezvous for thousands of visitors during the summer season and extend from the South Carolina to the Virginia line, both on the ocean and the inland waters. There are also many cities, not directly on the coast but which are nearby and have facilities for water sport and recreation. The State owns a number of lakes in eastern North Carolina which are being developed for the benefit of the public. These include Lakes Waccamaw, Black, White and Phelps, besides the many lakes in all sections of the state, developed by individuals and available to the public. The majority of the great power lakes have been opened to the public use.

Bathing, fishing, motor boating and a number of other sports find an ideal setting along the broad expanses of the Carolina coast. Immediately inside the coastline, for a distance of more than half the frontage of the State on the Atlantic, are North Carolina's inland seas which greatly add to its facilities for recreation, health, and sports. Some of the World's best fishing grounds are located in these sounds.

Sandhill Region.—A unique resort section of North Carolina, noted for its fine golfing, is known as the Sandhills, a rolling country suggestive of its name and having a particular appeal as a health and sport rendezvous. The region is heavily forested with the most picturesque of North Carolina's pine family, the longleaf. The bracing quality of the air and the restful spirit of the trees offer a novel attraction for winter visitors and rest seekers.

This region is famous for its beautiful hotels and winter homes of numerous residents. Golf, polo, fox hunting, tennis, riding and other sports are among the most popular attractions of this section.

Hunting and Fishing.—Facilities offered by North Carolina for hunting and fishing are as varied and extensive as the topography and climatic ranges of the State. Leading authorities have declared that in these sports the State stands first for variety and scope.

More than 600,000 acres included in private game preserves; and the State and Federal government's 170,000 acres in public refuges and shooting grounds, have made the State famous among sportsmen.

North Carolina as shown by recent game surveys, has a variety and stock of game that is attractive to any class of hunter. A census of game killed during the season of 1927-28 showed that 4,529,590 pieces fell before the hunters' guns, as follows: 1,555,270 rabbits; 1,263,360 squirrels; 4,510 deer; 28,260 raccoons; 324,210 opossums; 16,810 minks and skunks; 720 wildcats; 34,140 muskrats; 981,980 quail; 6,110 turkeys; 400 grouse; 2,820 pheasants; 17,540 snipe; 1,220 rails and coots; 12,740 woodcocks; 170,070 doves; 5,280 geese; and 103,690 ducks. More than 139,000 hunters took out licenses in North Carolina in 1927, paying in excess \$206,000 for this privilege.

For several types of hunting, North Carolina is nationally known. Her migratory waterfowl shooting grounds in Currituck, Albemarle, Roanoke, Croatan, Pamlico, Core and Bogue Sounds and at the mouths of various large rivers, draw hunters from all over the country. The establishment of numerous non-resident preserves proves conclusively that the State has no superior for quail shooting.

A comprehensive program of conservation by the State assures the maintenance of its supply of game in localities where it is already numerous, and the rehabilitation of wild life in others that have been depleted. Restocking by importation of game and breeding in captivity has been started on a broad scale. The State game farm at Asheboro raises thousands of quail annually. Yearly 2,000 pairs of Mexican quail are imported and released in North Carolina covers by the Department of Conservation and Development.

Game fishing is one of the most popular sports of the State. Her mountain streams are well stocked with trout and small-mouth bass and her coastal plain fishing waters are popular for the great quantity and variety of fish, including bass, perch and sun fish.

Planned Future for Sports.—With the army of fishermen increasing in the State and non-residents coming in great numbers to enjoy the angling, steps have been taken by the State to assure a supply of the finny creatures for the future. Six hatcheries operated by the Department of Conservation and Development as State institutions and two in co-operation with the United States Bureau of Fisheries, released ten million baby fish in the streams in 1927.

Visioning the future demands for recreation, North Carolina has established the first units of what is to be a comprehensive system of public playgrounds. Three State Parks have already been set aside; Mt. Mitchell, 1,200 acres; Fort Macon, 400 acres; and Rendezvous Mountain, 140 acres. Other areas are now being considered and will be added to the system as fast as they can be financed. State officials have set as a goal the acquisition of places of outstanding scenic and historic interest as sites for public parks, one or more within easy access to every section of the commonwealth.

Note:—Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Rules and Regulations of the Inland Fisheries of N. C.; An Act for Propagation and Protection of Game Fish in N. C.; North Carolina, A Good Place To Live; Hunting in North Carolina; Fishing in North Carolina; Digest of Game Laws; Conservation Laws; Circular No. 9, Federal Forest Purchases and Forest Recreation; Circular No. 14, Possibilities and Advantages of State Forests.

BANKS AND BANKING

The banking facilities of North Carolina have kept pace with the industries of the State during the period of development which may be said to have begun with the twentieth century, which would also mark the beginning of the general renaissance in North Carolina.

Not only has commercial banking properly developed but other branches of banking have been extended as well, so that today the banks and bankers of North Carolina are prepared to give a complete financial service to the industries and enterprises of the State.

Banking Facilities.—In addition to the commercial banks, devoted to the business of receiving deposits and making temporary loans for current business operations, many banks are developing trust departments devoted to the conservation of the estates that are being created by the people. The creation and conservation of estates go hand in hand. It is quite as important socially, as well as economically, to take care of an estate that has been created as it is to create a new estate. North Carolina has the largest trust company in the South between Baltimore and New Orleans, one of the 63 largest trust companies of the United States.

Along with the development of industries has come a demand for the means of the permanent financing of those industries. Such financing goes beyond the province of commercial banking and has created a demand for investment banking. The banks of North Carolina have met this demand by developing bond departments and auxiliary investment companies engaged in planning the financial structures of new and of re-organized enterprises, of purchasing and selling bonds in making mortgage loans and, in other ways, of planning a stable financial structure for the State's industries.

Safekeeping of Valuables.—There was a time when the wealth of the State was in the form of land and crops and livestock. Then there was little need of places of safekeeping for valuable properties. But now a rapidly increasing portion of the wealth of the State is in stocks and bonds, mortgages and commercial paper. All the tangible evidence of the wealth of a millionaire may be carried in his hand in the form of bonds and certificates of stock that are worth little in themselves but may be evidence of great wealth. This change has created a demand for the safekeeping of such valuable holdings. The banks of the State have met this demand by establishing safe deposit departments with boxes for valuable papers and storage space for valuable, but more bulky articles.

Class and Functions of the Banks.—The 374 state commercial banks and 72 national banks, and 41 industrial banks, with resources of over 550 million dollars, tell only a portion of the story of the banking facilities of North Carolina. These 487 banking institutions have equipped themselves to meet all the financial needs of the three million people of the State—from the loan of a few dollars to a wage-earner to the financing of its largest industries; from the settlement of a small estate to the administration of the largest trust; from the purchase and sale of a single government bond to the planning of the financial structure of the largest enterprise. Banking institutions of North Carolina have been singularly free from financial mistakes, evidencing the high calibre of their personnel. In 1928 the 232 B. & L. Asso. assets were \$95,009,520.

NORTH CAROLINA'S LOCATION AND COMMUNICATIONS

Location.—A thousand miles is covered in a day's travel by air, seven hundred miles takes but a like time by rail and five hundred miles is often made from sun to sun by automobile. The Capital of North Carolina is within one of these distances from practically every one of the country's great population and trade centers east of the Rockies or the Mississippi. The frontispiece radius map graphically illustrates how mail, express or passengers can travel between such points and this State in a length of time that is almost negligible from a practical standpoint.

Population Radius.—The strategic position of North Carolina in relation to the big distributing and consuming areas of the United States can best be realized through knowing that practically within the 500 mile radius of North Carolina's geographical center, are located such places of prime importance as Washington, Baltimore, Philadelphia, Pittsburgh, New York City, New Haven, Buffalo, Cleveland, Toledo, Detroit, Indianapolis, Cincinnati, Louisville, Birmingham, and Jacksonville. By extending the radius to 700 miles, outlying cities included are: Miami, Mobile, Memphis, New Orleans, St. Louis, Chicago, Milwaukee, Toronto, Canada, Boston and Portland, Me., and the "center," as well as the bulk of the population of the United States. The airplane zone of 1,000 miles includes practically all important points in this country, east of the Rockies, the West Indies and Canada, the extreme natural zones of influence of our State, including the Bahamas, Havana, Houston, Kansas City, Omaha, Minneapolis, St. Paul, Duluth, Montreal, Canada, Halifax, Nova Scotia and St. John's, New Brunswick.

This strategic location of the State has had much to do with its success and the obtaining of many of North Carolina's most important industries and new residents; it is a unique geographical position, and one that will prove of great commercial value in its future development.

Communications.—Three great railway systems, serving the South, the Southern, Atlantic Coast Line and Seaboard Air Line Railways, besides the Carolina, Clinchfield & Ohio Railway, the Norfolk-Southern Railroad, the Carolina & Northwestern Railway, and two links of the Norfolk and Western Railway, together with 46 short line railroads give North Carolina adequate, quick and economical freight and passenger transportation facilities. These railways cover practically every county in the State, with an aggregate length of 5,052 miles with many of the main lines double tracked. Close traffic arrangements are maintained with the chief trunk lines of the country, and advantageous freight and passenger rates and schedules are available.

Motor Bus and Express Lines.—Since motor transport entered the field in the last few years, it has completely blanketed North Carolina. This service in the rural sections is developing traffic which is not only beneficial to the truck lines but a feeder for the railroads as well. The map of all bus and motor freight lines appended shows what is believed to be as comprehensive, if not the most complete, motor transport of any state.

This rapid development of motor transportation has been due largely to the State's comprehensive system of surfaced highways, in the building of which about \$155,000,000 has been expended. More than half a million public and private automobiles, operating on these highways, have added vastly to transportation facilities of the State. Figuratively speaking, the city has been placed at the front door of the farmer and suburban dweller.

Railway and Highway Map.—The remarkable development in transportation facilities in the State, during the past decade, is graphically illustrated in the highway and railway map reproduced herewith; showing United States Highway, Number One, running from Maine to Miami, as it traverses North Carolina, as well as the network of rail and the numerous motor routes running north, south, east and west.

Water Transportation.—Waterways play their role in the matter of communication in the State. Eight local boat lines operate regular schedules on the sounds and rivers of Eastern North Carolina. Independent gas boats also offer service. There is limited regular steamship service between points in this State and Norfolk, Baltimore and New York. Wilmington, North Carolina's chief shipping port, with its splendid harbor facilities and 30 feet of water, has a regular steamship line communicating with other States. Considerable export and import business is also carried on by special and contract ocean craft. Undeveloped ports include Southport, with one of the finest harbors on the coast, and Cape Lookout harbor.

The inland waterway, which is laid out to extend from New England to Florida, is now being built by the United States government, at a cost of millions of dollars. More than half the distance through North Carolina is already completed.

Telephone, Telegraph and Radio Service.—A network of wire gives every county in the State telegraph and telephone service. In the matter of telegraphy the State is served by the Western Union and the Postal while something like 175 telephone companies cover the State so completely that even the remote rural districts may have instantaneous communication with the outside world. The Southern Bell operates more than half of the 150,000 telephones in the State. In addition to its local service its trunk line toll system gives quick interstate and international connection.

North Carolina, like other sections of the country, has caught the spirit of radio and its citizens are making good use of this marvelous means of communication. Thousands of receiving sets are in the homes of the people, even in the remotest rural districts, many of which are capable of international reach. Four broadcasting stations located at Asheville, Charlotte, Greensboro and Raleigh are operated in North Carolina.

Airfields and Airways.—Besides the Government mail air-lines, there are many airports, landing fields, and aeroplanes operating in the State, and their use is growing very rapidly. Herewith is a list of airports and landing fields now listed and mapped by the United States Department of Commerce:

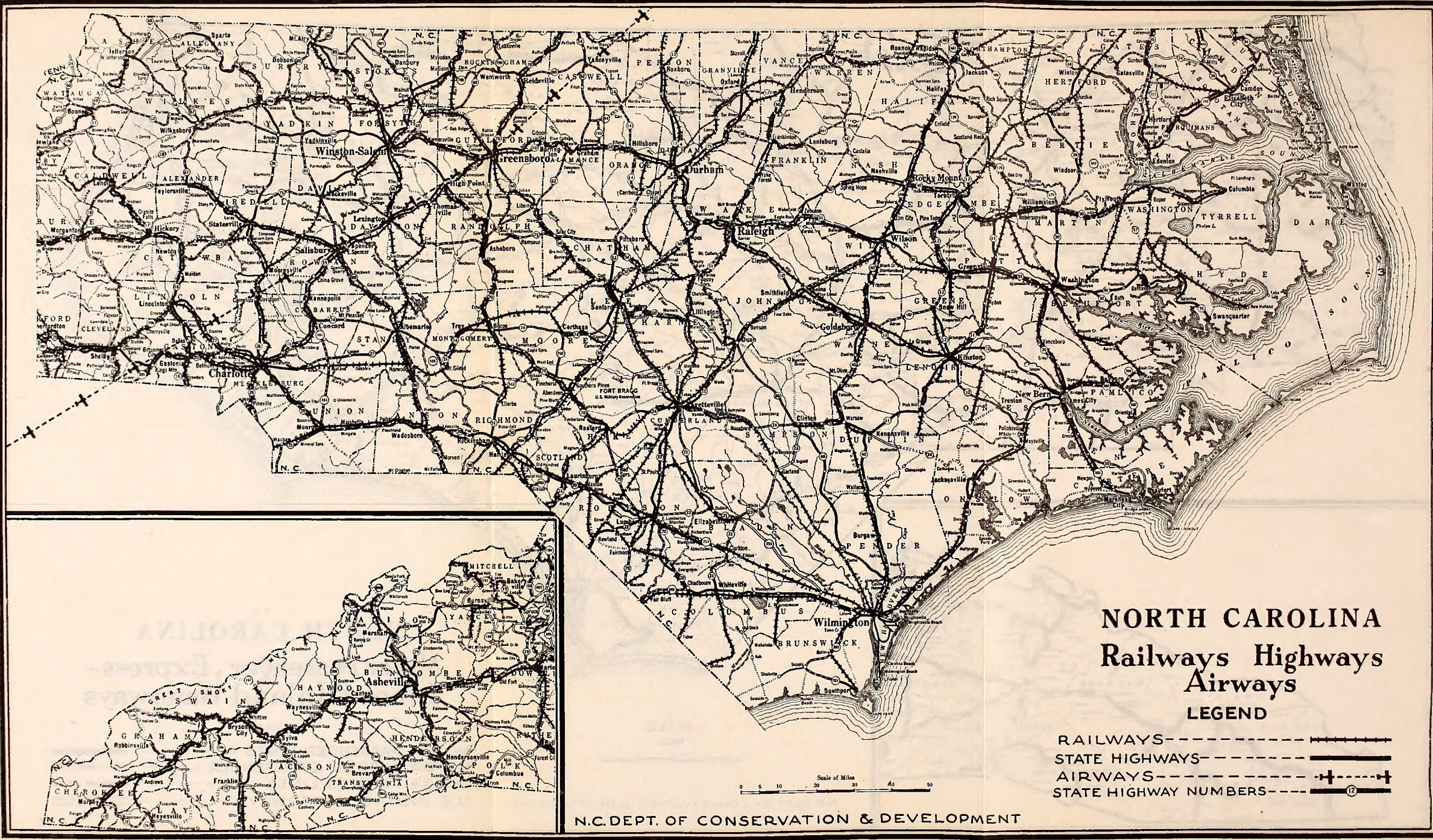
Asheville	Henderson	Pinehurst	Stanley
Charlotte	Lexington	Raleigh	Tarboro
Fayetteville	Milton	Reidsville	Wadesboro
Gastonia	Monroe	Rockingham	Wilmington
Goldsboro	Mooresville	Rocky Mount	Wadesboro
Greensboro	New Bern	Shelby	Winston-Salem

Street Railways.—Electric street railway lines are operated in Asheville, Charlotte, Durham, Greensboro, New Bern, Raleigh, Salisbury, Winston-Salem, Wilmington and Wrightsville Beach, and are supplemented by many local connecting bus lines.

HIGHWAYS OF THE STATE

A few years ago a prominent magazine stated, editorially, that, "Wherever good highways are constructed, prosperity and progress follow as surely as day follows night." The truth of this statement has been conclusively proved in the case of North Carolina. Since the inauguration of a definite program of State highway building in 1921 the State has shown marked progress in every line and today is often referred to as the "Leader of the New South", and the "Good Roads State."

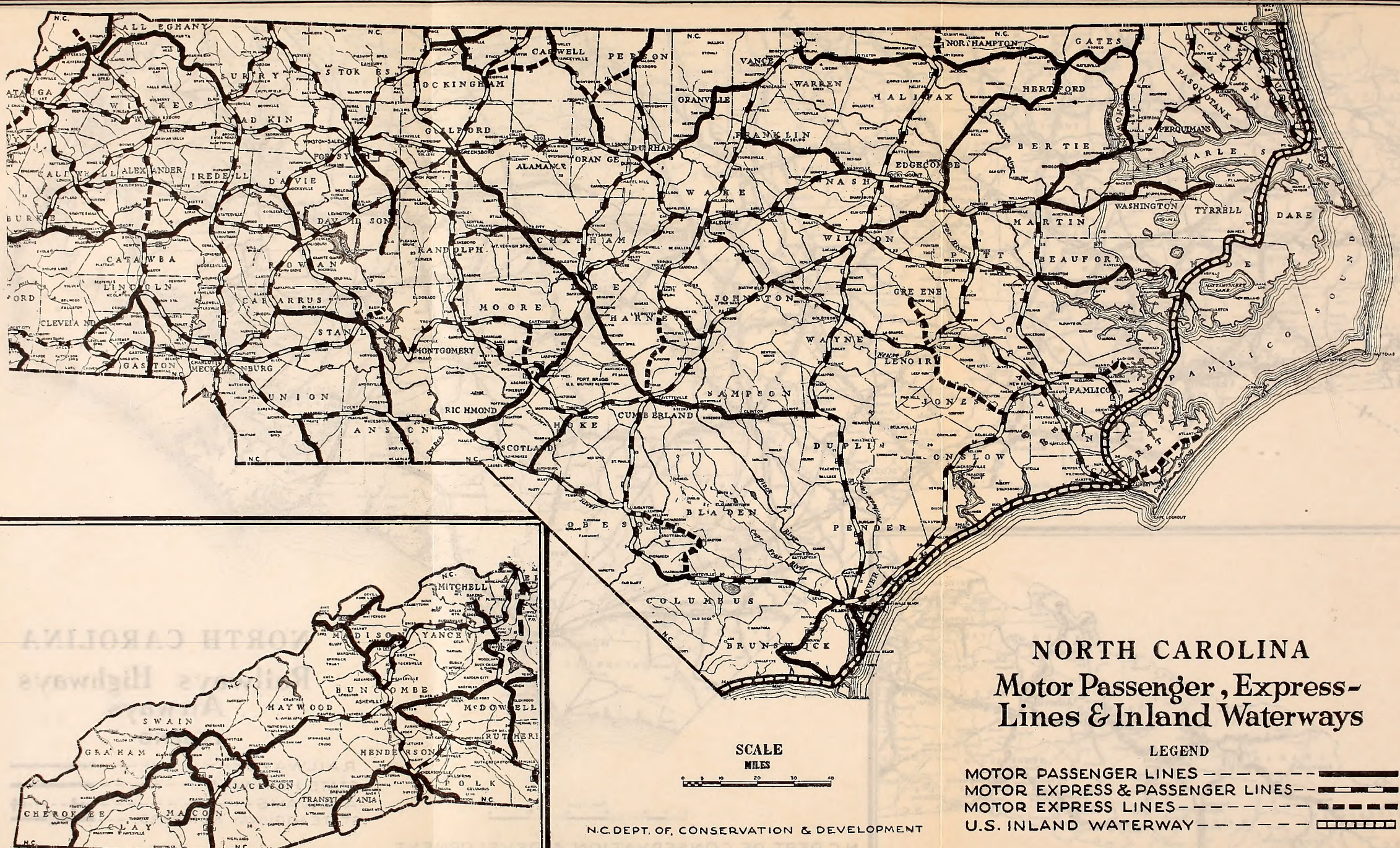
Financing Methods.—There has never been and never needs to be any burden on the property owners of the State for its road construction or maintenance. The expense of constructing and maintaining the present State highway system is placed, and properly so, upon the user of the road, the motorist. At the present time the receipts from the 4 cent per gallon tax on gasoline and from motor vehicle licenses are sufficient to pay: (a) the cost of administration of the State highway system; (b) the interest on all outstanding highway bonds issued and authorized; (c) sinking fund and serial payments for retiring the principal of all bond



NORTH CAROLINA Railways Highways Airways LEGEND

- RAILWAYS - - - - -
- STATE HIGHWAYS - - - - -
- AIRWAYS - - - - -
- STATE HIGHWAY NUMBERS - - - - -

Scale of Miles
0 5 10 20 30 40 50



NORTH CAROLINA

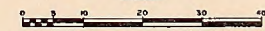
Motor Passenger, Express-Lines & Inland Waterways

LEGEND

- MOTOR PASSENGER LINES ————
- MOTOR EXPRESS & PASSENGER LINES ————
- MOTOR EXPRESS LINES ————
- U.S. INLAND WATERWAY ————

SCALE

MILES



N.C. DEPT. OF CONSERVATION & DEVELOPMENT

issues, within a period of twenty-five years from the present time; (d) full maintenance of the entire highway system according to the most improved methods, and (e) to produce a surplus for new construction of about \$5,000,000 and upward annually.

Extent of Highways.—The highway act of 1921 provided for a system of 5,500 miles which has grown until in 1929 it totals approximately 7,500 miles of which considerably more than half is paved and the rest is kept in perfect condition and may well be classed as "all-weather roads".

Increase in Automobiles.—No more striking vindication of the bond issue, or "pay-as-you-ride" plan of highway construction adopted by North Carolina, can be found than in the 300 per cent increase in the number of automobiles operated in North Carolina during the past six years, or since the highway program actually started. In 1921, when the first bond issues of \$50,000,000 was authorized, there were only 148,627 motor vehicles registered in the State; while in 1922 there were 182,550; in 1923 the number reached 246,812; in 1924 the registration was 302,232; in 1925 it was 340,287; in 1926, 385,047; in 1927, 430,499; and in 1928, 463,841. During 1927 North Carolina showed a greater percentage of increase in registration than any State in the Union, namely 11.8 per cent.

Revenues.—The increase in motor vehicle registration has brought about a large increase in revenue from this source which is constantly increasing. In the last eight years the highway act became effective, the State has received, approximately \$70,000,000 in gasoline and motor vehicle fees. In 1926 these taxes amounted to approximately \$13,000,000 and in 1927 to \$15,000,000 and in 1928 to approximately \$19,000,000.

Investment and Expenditures.—Since the original bond issues of \$50,000,000, was authorized by the General Assembly of 1921 additional bond issues to enlarge the system have been authorized by it at each successive biennial meeting. In 1923 a bond issue of \$15,000,000 was voted; at the session of 1925 a \$20,000,000 bond issue; and the session in 1927 added \$31,850,000, making a total authorized of \$116,850,000. In addition the State has received from the Federal Government, through the provisions of the Federal Aid Act of 1916, approximately \$12,000,000, and this, together with county loans and gifts and donations, has brought the total amount available for construction to approximately \$155,000,000. During the entire existence of the North Carolina State Highway Commission there has never been the least hint of scandal, graft, or corruption which is sufficient proof that these funds have been expended wisely and that a dollar's worth of roads have been secured for every dollar spent.

Dividends to Taxpayer and Motorist.—The natural question of the average American citizen regarding an investment is "What dividends has it paid?" The enormous investment in highways in North Carolina has not only been self sustaining, but it has paid large dividends which are enjoyed by all of its citizens.

Prior to the establishment of the State Highway System the upkeep of the 7,500 miles of roads operated by the State was a direct burden upon the taxpayers of the counties. In the majority of instances the work, because of inexperience and limited facilities, was done indifferently and expensively and at additional cost to the users through the poor condition of the roads and the wear and tear upon vehicles. The relief obtained

by the counties from the construction and maintenance of these roads, carrying approximately 80 per cent of the traffic, is a dividend of no mean importance. The laboratory service and expert engineering advice of the State Highway has been made available to the local divisions of government, in maintaining the county roads and this promises to be one of the most important contributions that this enterprise will make to its citizens.

Benefits to Education.—Our expenditure for the operation of public schools has grown from \$9,000,000 in 1920 to \$24,000,000 in 1927, and our investment in public school buildings from \$1,000,000 in 1900 to \$93,000,000 in 1927. The development of this public school system with its modern consolidated rural schools served by school busses would have been impossible but for the growth of the State Highway System. Today 1,050 of these schools are being served by 3,234 busses, transporting daily from the remote sections of the school districts 120,318 children. Exemplified in terms of educational advantages to the childhood of the State this dividend alone would justify the expenditure of the millions invested in highway construction.

Dividends to Agriculture.—Notwithstanding its rapid development and leadership in industrial lines, North Carolina is equally important as an agricultural state, ranking second to Texas only, among the Southern States, in the annual value of its farm crops. In handling the two major crops, cotton, amounting to approximately \$100,000,000 a year, and tobacco, bringing the farmers, in round figures, \$111,000,000 annually, good roads have been of great value, by making possible transportation to market with greater ease and less expense. In the handling of perishable crops such as truck, fruit, and berries, good roads are practically indispensable. In season one may see in the central industrial section of the State trucks from the eastern portion of the State laden with fresh vegetables, fruits, berries, or fish and oysters from the coast. Trucks loaded with peaches from the famous "Sandhills" in the southern portion of North Carolina, are found in scores of towns all over the State where their loads find a ready market. In the fall trucks coming east from the mountain section loaded with apples, late potatoes and cabbage, find a good market in the industrial section. These markets are not confined to North Carolina as the interstate shipments by truck play an important part in this commerce. During 1928 truck shipments of strawberries equivalent to 132 carloads were moved from two small towns alone, in Eastern North Carolina, and many of these trucks placed the berries on the market in New York City twenty-four hours ahead of the refrigerator service of the railroads and it is reported that the berries were in better condition and commanded higher prices than those shipped by train.

Social Benefits.—In addition to the direct monetary dividends to the farmers of the State, rural life has been made much easier by the development of good roads.

Dividends to Industry.—Good roads have played an important part in the industrial development of the State by making it possible to locate new plants away from the congested district, where land values and taxes are high, and to draw on the farms in the surrounding territory

for the necessary labor, which goes to and from work by automobile, thus doing away with the necessity of tenement houses and making living conditions better among the industrial laboring class.

Recreational Benefits.—Besides the Nationally known resorts of North Carolina scores of other resorts, hunting and fishing grounds have been made accessible through the development of the good roads. All of these points are easily reached over splendid roads and their possibilities, while affording a direct dividend to North Carolinians, are a real contribution to the people of neighboring and distant States, and are being visited by increasing numbers each year.

A New Industry.—Another and a considerable dividend from the development of the good road system in North Carolina, is the creation of a new industry in the State, namely a public carrier system of busses for the transportation of passengers and freight, covering over 6,000 miles of the State Highway System, operating on a daily, and in many instances, an hourly schedule. The State derives a revenue from a tax on the earnings of this industry amounting to approximately \$200,000 per year. The value of this new industry to the citizens of the State, in terms of convenience and economic service, may well be highly capitalized in the millions.

Benefits from Contacts.—In the last analysis, all values are relative to their influence on human life and the greatest indirect dividend of the splendid State Highway System of North Carolina is its socializing influence upon its people. A system of good roads, providing easy and economical transportation, banishing distance, will do away with isolation and encourage that spirit of fellowship that makes the whole world kin, and enable all citizens of the State to be neighbors.

Note: Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

Bulletin No. 16, Shade Trees of North Carolina, price 5 cents; Press Bulletin No. 162, Roadside Trees in North Carolina.

POPULATION, LABOR AND WAGES

What is the effective labor of North Carolina returning to the manufacturer for his wage dollar and *Why* are North Carolina workers more effective than those of some other localities? What fraction of each production-cost dollar is consumed by the wages paid out to manufacture the product of individual industries of the State? These important questions are covered in this chapter.

Background.—With its consecutive, earnest, fruitful background, there is small wonder that in the last eventful quarter of a century of the country's great educational, industrial and social progress, almost all of the ninety-nine per cent American born population of this State has moved in the vanguard—well officered—with its intelligent, loyal and self-reliant array of workers forming an irresistible industrial army. For intelligence and loyalty North Carolina labor is supreme.

Environment.—During these last twenty-five years, of intensive striving, North Carolina has been fortunate in having inspired leaders, whose vision foresaw the worth-while goal for their State, as a leader of the New South. These men have done much to supply to their fellow citizens, whether student or worker, the great boons of honest and economical

government, adequate and effective education, good roads, and encouragement and opportunity to the rural as well as the urban dwellers. These favorable conditions in North Carolina are described in an article in a Washington business magazine, written by a New England correspondent extract from which follows:

"The factory has called man from the farm and from the mountain. The mill village, with its schools, its churches, its community life, its moving picture show, its visiting nurses, its resident physicians, has taught what the world has learned of the art of living. Disease is being controlled, life is being prolonged, infant mortality is decreasing, sanitation and personal hygiene are common and not exceptional. The factory, and the mill have made modern Americans, with a broader, more comfortable and richer life. Industry has opened to them and their children the door of opportunity."

The workers on the farms of North Carolina outnumber those in the factories five to one and, as machinery and efficiency continue to increase, greater numbers will be released continually, for work in the industries and this almost inexhaustible source of intelligent labor will be available.

Climate.—So much has been said and written on the favorable effect on labor of North Carolina's "365 comfortable working days"; the economy of all-season clothing; the all-year abundance and reasonable price of food supplies; the ease of transportation to work or play during every day of the year; moderate heating and renting costs, and other phases of economy of life in a "medium" climate that it seems necessary to dwell only briefly thereon.

North Carolina, contains more points with an altitude of one thousand feet above the sea than any state in the South, except the "Lone Star State," and probably also enjoys the most even climate and temperature. Its range in mean temperature from coast to mountains shows a variation of only a comparatively few degrees, yet contains great enough local variety to suit all tastes.

Temperature.—Over a forty-year period, for the whole State, averaged 59° and for 1927 a regional record of 62.3° in the eastern division; 60.8° in the central section; 57.7° in the mountain region. The mean summer humidity and temperature in North Carolina are lower than the Pennsylvania, New York, Massachusetts, sector, while the State's winter temperature averages some fifteen degrees higher, with humidity lower, than in the foregoing Northern section.

Rainfall in North Carolina occurs in about twenty-five per cent *fewer* days than in the above section yet yields nearly the same per cent *more* precipitation.

Sunshine for over twenty-seven hundred glorious hours in a year, in most sections of the State, is exceeded in only a few localities of the United States.

Industrial house rents range from a few dollars a month in the mill village, to from \$10 to \$25 a month in the cities.

All these phases contribute to the economy of home life which permit the high standard of living among our workers.

North Carolina has the mild climate of the meridian of the Mediterranean basin and as one goes south of this latitude the temperature rises,

of course, until the heat of the tropics is reached. Extreme heat is conceded as good for certain plant life but is not beneficial to the comfort or activities of those engaged in manual labor, therefore, the effectiveness of workers diminishes as the heat rises above a reasonable "normal", or as it sinks below one. North Carolina labor can work or play with a maximum of comfort every month in the year.

Health.—The twelfth State in the country to organize a State Board of Health, North Carolina has increased the annual appropriation for this department from \$100 to \$350,000 a year. Sixty thousand school children were given medical treatment in 1928, and much was done for maternity, infancy and child hygiene. County health departments cooperate with the State Department to cover over fifty per cent of the population of the State. Sanitary engineering work and water purification has been actively engaged in, up-to-date public and private hospitals are maintained in all sections of the State.

The success of the health administration is evidence by the practical eradication of epidemics, with a death rate in the State below the average of the whole country and birth rate higher than that of any other State.

Training.—Skill in work or play wins the goal over a novice: A quarter of a century ago North Carolina was a State whose workers were drawn principally from the farmers, fishermen, or hunters, of the State.

When the call to industry became stronger at that time, and after the urban workers were all engaged, the farms, the hills, the shores were called upon for their men and women to fill the new field. It surprised even those who knew the State best how readily these independent, self-reliant folks came forward, entered the industrial field and "made good." To-day more than five thousand establishments in the State hum with the industrial activity of their skilled workers and ever is there a call for more. The ease with which new plants are manned often surprises the trained personnel man. Numerous specific cases are cited where curiosity was expressed as to the source of new workers to fill sometimes many thousands of new "jobs", but in each case when advertisements were placed asking for applications, from two to ten times the number of workers needed applied. North Carolina has ample and efficient workers to supply any new industry that needs them.

Heavy manual labor is required in every active community and this need is permanently settled in this state by the twenty per cent of the native colored labor which is ample to handle effectively the heavy work performed by the lower grade foreigners in many sections of the United States.

Labor Costs in North Carolina.—The labor statistics for 1927 show the average number of wage earners in each of the forty-nine classifications of industry for North Carolina, the amount of wages paid them and the production cost by such labor, and deduced, therefrom, the fraction of each dollar of cost of production which was expended for wages in each classification and the same information for the average of all classifications, the latter being at the rate of twenty-three cents for each dollar of production cost.

One of the most important items in this table is the number of pennies of labor cost in each production cost dollar, as shown in the last column.

This is the true index of what is furnished for the wage dollar, from the intelligent and effective North Carolina labor, in these leading classifications of industry.

WAGES AND PRODUCTION COSTS IN NORTH CAROLINA

Industry	Average Number Wage Earners	Total Wages Paid	Production Cost	Wages per Dollar of Production
Beverage	844	\$ 943,210	\$ 4,965,980	\$.19
Bread and other bakery products	1,012	1,190,239	4,512,425	.26
Confectionery	221	169,075	1,085,197	.15
Flour and other grain products	563	519,616	15,991,040	.32
Ice Cream	325	338,153	2,397,516	.14
Ice	540	601,626	1,887,950	.32
Nuts, processed	372	127,080	3,553,186	.31
Slaughtering and meat packing	89	79,661	1,770,736	.45
Lard substitutes	61	62,400	6,495,600	.09
Bags, other than paper, not made in textile mills	209	218,175	1,016,936	.12
Carpets and rugs, wool other than rag	287	312,424	1,194,217	.26
Cordage and twine	1,456	915,094	5,160,372	.17
Cotton goods, yarn and woven fabrics over twelve inches wide	95,809	66,122,495	258,424,476	.22
Dyeing and finishing textiles	2,548	2,229,866	16,342,376	.13
Jute goods	450	254,584	1,366,331	.11
Knit goods	17,430	11,963,107	51,339,532	.23
Silk manufacturers	1,060	1,263,325	6,709,848	.19
Woolen goods	1,158	1,028,981	4,441,944	.23
Clothing, men's work, except shirts	1,375	832,634	4,016,358	.21
Structural and ornamental iron work	285	401,563	1,855,341	.22
Boxes, wooden except cigar	865	604,898	3,000,817	.20
Caskets, coffins, burial cases and mortician supplies	199	218,160	1,055,077	.21
Furniture	14,821	12,417,590	42,491,090	.29
Lumber and timber products, not elsewhere classified	18,421	12,935,355	32,188,833	.40
Planing mill products	2,905	2,489,111	12,618,427	.21
Leather, tanned, cured and finished	1,342	1,237,243	13,671,590	.09
Rubber tires and inner tubes	334	380,836	2,762,322	.14
Paper	283	354,558	3,433,531	.11
Printing and publishing, book and job	697	1,018,639	2,535,241	.40
Printing and publishing, newspaper and periodical	1,058	1,819,469	5,769,622	.35
Pulp	1,143	1,312,844	5,379,550	.24
Tanning materials, natural dyestuff, etc.	234	156,927	982,037	.16
Fertilizers	1,842	1,532,364	16,183,341	.09
Gas, manufactured	342	381,388	1,866,424	.20
Cottonseed oil, cake and meal	1,418	1,067,922	15,457,328	.07
Patent medicines and compounds	97	79,744	921,287	.09
Asbestos products	291	304,639	1,911,536	.16
Clay products, other than pottery	1,677	1,199,742	2,944,562	.41
Marble, granite, slate and other stone products	940	1,266,372	2,222,202	.57
Minerals and earths, ground or otherwise treated	367	283,143	1,004,054	.28
Mirrors, framed and unframed	198	209,970	2,060,440	.10
Tobacco, chewing and smoking	1,892	961,428	8,413,162	.11
Tobacco, cigars and cigarettes	14,087	11,583,647	136,698,676	.08
Foundry and machine products	1,049	1,298,442	3,187,454	.41
Textile machinery	349	425,495	1,294,136	.33
Motor vehicles	366	573,514	4,669,717	.12
Car and general construction and repair, Steam Railroad	4,611	6,369,417	14,447,153	.44
Mattresses and bed springs	252	221,904	1,158,233	.11
Paving material, other than brick or granite	814	676,093	1,713,869	.39

Average cost, wage \$.23

WEALTH AND TAXES

In other literature issued by this Department is set forth in detail the essential facts concerning North Carolina taxes and indebtedness. Information is given on tax sources, rates and amounts collected, as well as the safeguards adopted by the State against oppressive taxes and unnecessary expenditures. The State debt is analyzed and explained. Such pamphlets will be sent on request. In this chapter only policies relating to taxes and debts will be touched upon.

North Carolina does not levy a State tax on land or personal property, leaving these sources of revenue to the several counties and cities; instead, since 1922, the State has had a graduated tax on net incomes, and taxes for franchises, licenses, and inheritances.

During the last few years the State has built one of the best highway systems in the world from bonds and from revenue collected entirely from automobile license and gas tax. The present construction costs and maintenance of North Carolina highways are financed entirely from the taxes on motor vehicle and motor gas.

The development of manufacturing in North Carolina has been almost phenomenal. The value of manufactured products in this State has nearly doubled in the last seventeen years, increasing from \$665,000,000 in 1910 to nearly \$1,155,000,000 in 1927.

The counties, cities and towns are supported principally by local taxes on real and personal property. Both the rates and values assessed, it has been shown, are lower than in industrial centers of other states. There is even a marked trend, due to State and local budgets and fiscal reform laws, towards lower taxes in North Carolina.

The debts of the State and local communities have been created for necessary improvements, investments for the common good. These facilities for progress and comfortable living conditions are reflected in the quality of the people. If the State does not provide for its citizens a standard of living conditions, education and recreation, to which they have the right, industry, out of its own funds, must do so at a cost greater than that which is imposed by the public taxes levied for those purposes by North Carolina.

County Laws and Taxes.—The county government laws providing for county fiscal control in North Carolina are so broad and effective as to challenge the interest and commendation of all. Their budgetary provisions set up a trained personnel with power, not only to supervise but to initiate and control economical and effective planning of county taxes and expenditures. Two laws, "The County Finance Act" and "Improved Methods of County Government," enacted by the General Assembly of 1927, have accomplished important reforms in County Government. Today business methods are prescribed in the State's 100 counties; taxation, debt and expenditures are regulated in a modern manner. Some of the important provisions of these laws are the following: (1) County budget system. (2) Limitations on county debts. (3) Bonds to be issued only by popular consent. (4) Sinking funds provided for and made inviolate. (5) Provision for a manager and fiscal control agent in each county. (6) State Advisory Commission to assist counties in solving their problems in the light of best modern practice.

The above measures have already proved themselves of great value. A majority of the counties, by coöperation with the State, have shown an earnest desire to safeguard the rights of the people in the matter of public taxes, county expenditures, and indebtedness. These effective laws are doing for the counties much the same service that the State Budget System is doing for the State.

City and Town Taxes.—The taxes and expenditures in the various towns and cities of the State naturally vary according to local needs and the degree and class of development in social and industrial matters each town has attained. There are various influences that affect conditions therein besides population and wealth. The great extent of North Carolina and its various zones and altitudes have a considerable effect on local conditions and development. In addition to natural conditions, social and industrial development are often accentuated by the "spirit" or personalities of communities. The attitude of mind, desires and needs—personal and industrial—of the individual in a community often affect the extent of its taxes. To pass an intelligent judgment upon its tax rates and status, each city needs individual study and full analysis of all its conditions and opportunities.

Purpose of Local Indebtedness.—Through exhaustive analysis of the indebtedness of the taxing subdivisions of the State, the chief purpose and use of the funds from local bond issues were shown in 1927 to have been for permanent improvements.

County bonds were used almost entirely to finance county roads, bridges, public buildings and schools, representing over one hundred million dollars of substantial assets. The county floating indebtedness was mostly long term, for schools, roads, etc. Aside from the foregoing obligations, only about five and one-half million dollars was owed by the one hundred counties.

The proceeds from district bonds were used almost entirely for district school buildings, and roads, from which were created over fifty million dollars of assets.

Funds obtained from city bonds were used mainly for streets, sidewalks, sewers, water, electric plants, public building and other permanent improvements. These permanent assets have enriched their localities one hundred and fifty to two hundred millions of dollars. Aside from such bonds, only about seven millions dollars were outstanding for funding of current expenses. Only about five million dollars unbonded debt was outstanding against the cities—mostly for streets, sidewalks, sewers, etc.

The assessed value of all property in North Carolina in 1928 was 2,963,302,911 and the true value, as estimated by the United States Bureau of the Census for 1922 was \$4,543,110,000. In 1925 it was estimated by the National Industrial Conference Board at a true value of \$5,284,000,000. With only the same ratio of increase in values in the last three years the actual values would exceed six billions of dollars. This would indicate the present assessed valuations in the State as less than 50 per cent of the true values.

The State Budget and Its Purposes.—Each of the more than sixty spending agencies, of the State government of North Carolina is required

to submit to the Budget Bureau detailed estimates of the manner in which it plans to utilize its funds. In this way is ascertained what each one of these numerous agencies propose to spend during the biennium, the fiscal year, and each quarter of such year. In addition, they show the revenue it is estimated they will collect.

Each unit is required to submit figures to the Budget Bureau comparing *actual* expenditures with *those authorized* and to measure actual revenues with those previously estimated, and thus to insure that the spending agencies operate within their income. Figures of the actual results of the budget are gathered together by the State's Chief Executive and published by him periodically for the information of all. An institution cannot be embarrassed by spending so much of its appropriation in the first few months of the year as to put it in straightened circumstances thereafter and invite a deficit. The financial condition of the State is essentially sound.

Assets and Liabilities of the State.—A financial expert's first thought is for the "balance sheet" of a business organization, to ascertain how the capital and assets have been invested and the surplus or deficit shown,—consequently the tangible assets of a State are of prime importance in the analysis of its progress and standing, as well as the rating of its financial obligations. A brief balance sheet of the State of North Carolina, a unique development in state accounting, is herewith given.

State Balance Sheet.—The Director of the Budget of the State of North Carolina prepares a statement, as of June 30 each year, showing the current and capital assets and liabilities of the State; that of the fiscal year ended June 30, 1928, is appended. This statement shows a substantial surplus and reserves of \$90,947,691.06 over and above the net debt of the State.

Current assets	\$ 23,681,682.65	
Capital assets.....	252,102,814.19	
Total assets of state.....		\$275,784,496.84
Current liabilities.....	\$ 10,282,419.34	
Capital liabilities.....	174,554,386.44	
Total liabilities of state.....		\$184,836,805.78
Excess of state's assets over liabilities.....		\$ 90,947,691.06
Consisting of—		
General fund surplus (in cash).....	2,235,232.50	
Reserves for highway and other special funds.....	11,164,030.81	
Capital surplus (in fixed properties).....	77,548,427.75	
Total surplus and reserves.....		\$ 90,947,691.06

Present and Future Assets and Taxes of the State.—The people of this State have provided themselves out of taxes with modern facilities. In other, less fortunate, states, these things are still to be bought and paid for and what their taxes will be then, no one can foretell. While North Carolina taxes are coming down, those of many other states, in all probability, will be going up.

North Carolina is also taking the lead in budgetary control and other modern methods to safeguard the spending of public funds to the end that the taxpayer gets full value for his money.

According to the Federal Department of Commerce, North Carolina, in 1926, paid only \$5.76 per inhabitant toward the maintenance of the State Government, exclusive of capital outlay and interest charges. Only one state, Alabama, paid less, \$5.66 and the other 46 states paid more, Nevada having the highest rate, \$26.05 per person.

Note:—Detailed data bearing on the above matter is contained in the following pamphlets issued by the Department of Conservation and Development from which they can be obtained on request:

North Carolina Taxes and Debts; What They Are and What They Have Bought; Governor McLean's Financial Report and Balance Sheet of N. C.; N. C. Facts & Figures, 1928; Circular No. 11, Forest Fires and Taxation; Press Bulletin 174, Forest Taxation.

OPPORTUNITIES IN INDUSTRY

It is much more simple to catalog the industries a state already has than to list those that it is profitable to add. In fact, it is essential to know what a state or city produces to judge best what it should add to such production. It is equally essential to analyze the possible market for products, compare the demand with the supply, to be able to judge if there is need of more or fewer goods than are manufactured in the trade area and what is their class and extent. The addition of competitive lines is not in itself detrimental, but is often helpful in creating a community of interests and variety of goods to attract buyers, and also in the buying of materials and having skilled labor to draw upon. However, more factories in any one line than can sell their products to advantage is as demoralizing as it would be to have a grocery on every corner or a surplus of other retail stores, which the community could not support. Both would lead to ruinous competition and losses.

What Industries Does North Carolina Want?—For the foregoing reasons the Department of Conservation and Development has laid the foundation for a careful analysis of what industries it would be most profitable for North Carolina to expand or add to its already highly developed and diversified list of products. Several surveys, which should help to pick profitable prospects for expansion have been already made by this department. The final compilation and publication of the comprehensive data of the Census of Manufactures, 1927, for North Carolina made by this department and various deductions and analyses that it will make therefrom and publish from time to time, will point out favorable opportunities for further expansion and the establishment of new industries within the State.

It is interesting to note in the preliminary tabulations of the State's largest industries, the textile group, that some of the smaller industries, usually classed in this group, show larger percentages of growth in the last two years in North Carolina than do the main textile manufactures, and might be the logical for further expansion in the group. The dyeing and finishing of textiles, for instance, shows a very large increase, proportionately, in the biennial manufactures census for 1927, as follows: Dyeing and finishing a total value of products and wage payments showing an increase of 125 per cent, and value added by manufacture 120

per cent; number of establishments have increased from ten to seventeen, or less 70 per cent and wage-earners have almost doubled in number.

The cotton small wares group is also shown to have increased substantially as follows: Number of establishments from five in 1925 to nine in 1927 and wage earners from forty-four in 1925 to one hundred sixty-one the last year, with an increase in amount of wages paid of, approximately, 300 per cent. Material used increased 200 per cent, total value of products 245 per cent and value added by manufacture 300 per cent. The cordage and twine industry is stated to have grown in the biennium as follows: "Number of establishments 12½ per cent, wage earners 28 per cent, wages 42 per cent, value of products 3.5 per cent, value added by manufacture 45 per cent, while materials cost 12 per cent less to buy."

Preliminary information from which indication may be had as to how one particular industry of the State and counties could most logically be expanded are:

1. The appended Table A, shows statistics of the fifteen groups of textiles and their products, as classified in the United States Census of Manufacturers, *none* of which are produced in North Carolina.

2. Table B, showing sixteen groups of textiles largely produced in the textile trade, but little of which is produced in North Carolina.

3. Table C shows thirty-three groups of textiles now manufactured in the United States, only eighteen of which are produced in North Carolina.

From these tables it is not difficult to ascertain what textiles are not largely produced in the State, if at all. It has been suggested that the following lines could be expanded profitably in North Carolina. Large print works, bag manufacturing plant, and "cutting-up" trade to use the semi-finished materials produced in the State and shipped out again for finishing.

PRINCIPAL TEXTILES PRODUCED IN THE UNITED STATES NOT PRODUCED IN
NORTH CAROLINA

TABLE A

Industry	Number Establish- ments	Wage Earners	Wages	Cost Material	Value Products	Added Value by Manufacture
Artificial Leather	18	2,659	\$ 3,800,990	\$ 31,238,279	\$ 40,931,682	\$ 9,693,403
Asphalt felt base floor covering	11	2,464	3,337,770	14,930,491	32,532,483	17,601,992
Collars, men's	28	7,187	5,502,920	11,792,449	27,587,675	15,795,226
Corsets	185	14,525	12,394,094	37,808,237	77,114,850	39,306,603
Cotton Laces	42	7,006	7,620,106	13,361,423	30,843,507	17,482,084
Felt goods, wool or hair	50	5,146	6,403,687	26,354,123	43,775,618	17,421,495
Hat and cap material	89	2,127	2,413,187	15,218,093	22,049,047	6,830,954
Hat and caps except felt and straw	579	6,552	9,242,937	22,698,729	43,822,729	21,124,000
Hats, fur and felt	146	15,156	20,466,420	40,124,184	80,066,390	39,942,206
Linen Goods	18	2,780	2,462,179	6,394,303	11,156,585	4,762,282
Linoleum	6	4,872	6,392,699	19,966,626	44,999,453	25,032,827
Oilcloth	9	1,160	1,675,299	13,549,171	17,843,375	4,294,204
Wool Pulling	23	573	840,859	13,637,313	15,209,221	1,571,908
Wool shoddy	68	2,218	2,609,261	14,912,456	21,021,882	6,109,426
Worsted Goods	329	98,168	108,834,754	400,783,613	596,266,304	195,482,691

TEXTILES LARGELY PRODUCED IN THE UNITED STATES BUT ONLY SMALL AMOUNT
OF WHICH IS PRODUCED IN NORTH CAROLINA

TABLE B

Industry	Number Establish- ments	Wage Earners	Wages	Cost Material	Value Products	Added Value by Manufacture
Awnings, tents, sails and canvas covers	905	6,249	\$ 7,500,561	\$ 27,453,156	\$ 48,568,984	\$ 21,115,828
Bags other than paper not made in textile mills	162	11,404	9,331,815	150,102,277	175,081,911	24,979,634
Carpets and rugs, wool other than rag	69	33,886	43,382,517	104,195,624	188,902,890	84,707,266
Clothing, Men's not elsewhere classified	4,000	174,332	203,847,350	557,470,520	1,087,237,742	529,767,222
Clothing, Women's not elsewhere classified	6,127	126,466	175,044,511	724,298,974	1,293,705,291	569,406,317
Cordage and twine	118	15,400	14,018,511	66,847,504	100,447,564	33,600,060
Cotton small wares	230	16,162	15,547,190	41,816,332	74,675,096	32,858,764
Furnishing goods, men's not elsewhere classified	419	21,094	17,438,160	69,861,348	120,867,596	51,006,248
Gloves and mittens, cloth not made in textile mill	118	7,798	4,810,079	15,734,995	25,660,306	9,925,311
Housefurnishing goods, not elsewhere classi- fied	433	9,307	9,142,570	51,078,800	78,654,563	27,575,763
Jute Goods	23	6,312	5,639,574	14,566,709	27,517,467	12,950,758
Waste	105	3,033	2,569,827	29,765,941	38,942,595	9,176,654
Shirts	840	49,864	35,673,731	129,753,752	225,962,922	96,209,170
Woolen goods	503	67,056	82,436,037	219,618,330	361,524,034	141,095,704
Silk	1,659	132,509	142,733,539	484,122,527	808,979,399	324,856,872
Suspenders, garters and other elastic goods made from webbing purchased	93	3,835	3,072,392	16,499,915	27,504,028	11,004,113

OTHER TEXTILES AND THEIR PRODUCTS FOR UNITED STATES AND NORTH CAROLINA
(AS CLASSIFIED IN UNITED STATES CENSUS OF MANUFACTURES)
FIGURES FOR UNITED STATES ARE FOR 1925 AND FOR NORTH CAROLINA FOR 1927

TABLE C

Industry	Number Establish- ments	Wage Earners	Wages	Cost Material	Value Products	Value Added by Manufacture
Belting other than leather and rubber made from pur- chased fabric	U. S. 11 N.C. 0	254	\$ 264,246	\$ 1,595,602	\$ 3,111,500	\$ 1,515,898
Carpets and rugs, rag	U.S.. 139 N.C. 0	1,901	1,875,750	1,942,334	5,709,812	3,767,478
Cloth, sponging and refinishing	U.S. 61 N.C. 0	931	1,889,118	203,429	3,888,852	3,685,423
Clothing, mens, but- ton holes	U.S. 30 N.C. 0	327	346,855	71,047	658,064	587,017
Cotton Goods	U.S. 1,366 N.C. 374	445,184 95,786	353,882,870 66,149,690	1,077,152,614 184,509,360	1,714,367,787 310,299,158	637,215,173 125,789,798
Dyeing and finishing textiles	U.S. 697 N.C. 16	70,749 2,545	83,983,377 2,228,412	244,700,113 13,381,416	432,537,416 18,996,189	187,837,303 5,426,743
Flags and banners	U.S. 49 N.C. 0	1,031	890,426	2,332,222	4,588,111	2,614,773
Flax and hemp dress- ed	U.S. 9 N.C. 0	82	88,534	244,417	459,071	214,654
Haircloth	U.S. 15 N.C. 0	355	387,450	1,897,479	2,746,225	848,746
Hammocks	U.S. 4 N.C. 0	121	97,716	367,420	574,058	206,638
Hats, wool and felt	U.S. 22 N.C. 0	1,854	1,985,798	5,122,755	8,948,644	3,825,889
Horse blankets, fly nets and related products	U.S. 20 N.C. 0	694	564,061	2,535,217	3,896,918	1,361,701
Knit goods	U.S. 1,987 N.C. 128	186,668 17,427	168,682,840 11,961,236	453,925,780 37,378,779	809,960,213 61,365,806	356,034,433 23,995,027
Matting and matting grass and coir	U.S. 10 N.C. 0	902	766,871	1,526,453	3,491,538	1,965,085
Nets and seines	U.S. 21 N.C. 0	885	762,489	3,478,993	5,157,491	1,678,498
Regalia, badges and emblems	U.S. 85 N.C. 0	1,992	2,032,832	3,962,261	9,623,018	5,660,757
Upholstering materi- als not classified elsewhere	U.S. 34 N.C. 0	1,196	1,174,403	5,122,777	7,997,832	2,875,055
Wool scouring	U.S. 25 N.C. 0	1,112	1,600,657	2,527,166	5,831,480	3,304,314
Woolen goods	U.S. 503 N.C. 6	67,056 1,156	82,436,037 1,028,079	219,618,330 3,317,912	361,524,034 5,505,489	141,905,704 2,187,577
*All Others	N.C. 14	1,824	1,295,809	4,205,284	7,266,011	2,990,845

*Figures of industry cannot be given separately.

The imports and exports of each class of goods, as well as the attainable domestic markets, must be carefully considered.

At this writing the figures for 1927 have not been completed for the United States, nor are they yet available for any but a few classifications. Even after completion it will take extended study and deductions to supply estimates on each class as to the extent of its availability for further exploitation in the country at large or in North Carolina, in particular. General indications, however, can be drawn from the figures included in the general tables appended to point the way to the best fields of expansion in each group of industries in North Carolina.

Without the figures for the United States as a whole, or those of the competitive southern states, for 1927, which will be available later, it would be inadvisable as yet for this department to make any extended recommendations as to the most advantageous fields for the expansion of industry in North Carolina. From the textile tables alone, however, it is obvious that there are thirty or more branches of the textiles which are not manufactured within the State; opportunities in other lines are noted in the chapter devoted to each industry.

Some of these opportunities have been noted in the charter of mineral resources, forestry and furniture and there are numerous attractive openings for the manufacture of farm products such as creameries, condensed milk, cheese factories, canning plants, peanut products, stock raising and meat packing.

Goods Bought Outside of North Carolina.—A recent survey by the department of a cross-section of the State manufactures disclosed the fact that, among many other importations of goods into the State, the following supplies or products were being bought outside North Carolina although they might be made or carried through some process within the State: Asbestos fiber, auto top material, asphaltum, alcohol, boxes, bags, buttons, bottles, brass, bolts, nuts, and washers, broadcloths, cartons, coal and coke, cotton, cement, cloth, cuts (butter), caskets, crowns (for bottles), corn (broom), gauntlet material, dynamite, denims, extracts and concentrates, envelopes, emery, flour, fruit (crushed), flavoring, general mill supplies, glass, glue, gelatine, harness, saddlery and casket hardware, handles (broom), iron and steel, knit jersey cloth, leather, brake lining, lime plaster and plaster of paris, lard, lumber, mica (sheet), sheet metal, milk and cream, potash, packing material, paper, rayon, rags, sugar, silks, syrup, tankage and oil, twine, thread, tags, veneer, wool, wheat, and carpet waste.

New Industrial Establishments in North Carolina in 1926-27.—New plants established in North Carolina since the 1925 Census of Manufactures was taken, as reported by local trade bodies, include the following substantial list:

NEW FACTORIES ESTABLISHED IN NORTH CAROLINA IN 1926-1927

Textile	Sand & Gravel—1	Flour Mills—8
Factories	Tile Culverts—1	Ice Cream—4
Specialties—1	Roofing—1	Pickles—1
Fabrics—2	Conduits—1	Extracts—1
Dye Wks.—2	Skylights—3	Puddings—1
Ginning—11	Elev. Shafts—1	Candy—4
Silk—2	Window Shades—1	Mayonnaise—2
Cotton—4	Doors—1	Pasturizing—1
Draperies—1	Cut Stone—1	Dairy—1
Rayon—1	Terra Cotta—1	Pork Packing—1
Supplies—1	Glass—1	Meat Packing—1
Prints—1	Columns—1	Fish Packing—1
Knitting—34	Wood	Sandwiches—1
Plush & Velour—1	Wagons—1	Cheese—1
Processing—1	Saw Mills—35	Miscellaneous
Bleach & Dye—12	Headings—1	Oil—1
Hosiery—8	Brooms—1	Newspapers—6
Yarn—3	Kitchen Cabs.—4	Printing—8
Hdkfs.—2	Shuttle Blks.—1	Laundry—2
Silk Throwing—1	Furniture—3	Mattresses—6
Clothing	Artf. Limbs—3	Oxygen—1
Shoes—1	Planing Mills—6	Coal Mines—2
Shirts—1	Wood Boxes—1	Fertilizers—2
Clothing—1	Handles—2	Chemicals—2
Tobacco	Floorings—1	Paper Boxes—2
Manuf.—2	Refrigerators—1	Medicine—2
Redrying—2	Baskets—1	Monuments—1
Metal	Barrels—1	Tents—3
Machine Shop—1	Mine Supplies—1	Hair Tonic—1
Casings—1	Wood Products—1	Shoe Polish—1
Air Filters—1	Carriages—2	Asbestos—1
Bean Harvesters—1	Paperboard—1	Leather Goods—2
Iron Works—1	Autos	Mirrors—1
Machinery—3	Bodies—1	Luggage—1
Flues—2	Batteries—1	Bedding—1
Novelty—2	Motor Cars—1	Engraving—1
Signs—2	Radiators—2	Gas Plant—1
Cultivators—1	Top Covers—2	Tanning—1
Sheet Metal—1	Tops—1	Light & Power—2
Sprinklers—1	Foods	Talc—1
Screens—2	Cannery—2	Soapstone—1
X-Ray Machines—1	Ice—7	Feldspar—1
Building	Bakery—8	Boat Building—1
Brick—4	Drying	
	Sweet Potatoes—1	

While North Carolina is one of the leading industrial states and in some lines, no doubt, is producing as much or more than the output required by the present trade, yet there are numerous lines, or modifications of the present products, which could be advantageously considered for profitable exploitation or expansion at this time.

The statistics of all industries of the State, gathered in the Census of Manufacturer, 1927, are given in the following tables and should serve as a valuable guide in the analysis of the industrial conditions and opportunities in North Carolina.

STATISTICS OF ALL NORTH CAROLINA INDUSTRIES, 1925-1927

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
All Industries of North Carolina:						
Total 1927	2,984	204,590	\$158,394,434	\$560,819,236	\$1,154,646,612	\$593,827,376
Total 1925	2,614	182,234	134,237,097	550,706,965	1,050,434,117	499,727,152
Increase or decrease—	394	23,370	23,575,623	10,037,314	102,048,047	92,010,733
Per cent increase or decrease—	15	13	18	2	10	18
Agricultural Implements:						
Total 1927	12	163	164,538	280,111	714,574	434,463
Total 1925	12	201	220,668	334,886	903,999	569,113
Increase or decrease—		—38	—56,130	—64,775	—189,425	—134,650
Per cent increase or decrease—		—19	—26	—19	—21	—23
Baskets:						
Total 1927	8	390	174,683	310,693	690,039	379,346
Total 1925	5	158	102,802	116,683	306,582	189,899
Increase or decrease—	3	232	71,881	194,010	383,457	189,447
Per cent increase or decrease—	60	150	70	170	126	100
Belting—leather:						
Total 1927	5	31	38,034	421,575	625,570	203,995
Total 1925	Comparative figures not available.					
Beverages:						
Total 1927	160	844	943,210	3,575,164	8,432,773	4,856,990
Total 1925	121	650	664,867	3,117,697	6,912,623	3,794,926
Increase or decrease—	39	189	271,102	419,555	1,425,363	1,005,808
Per cent Increase or decrease—	33	30	41	14	21	26
Boxes, wooden, except cigar boxes:						
Total 1927	14	865	604,898	2,204,578	3,386,434	1,181,856
Total 1925	18	890	588,137	2,131,304	3,273,269	1,141,965
Increase or decrease—	—4	—25	16,761	73,274	113,165	39,891
Per cent increase or decrease—	—22	—3	3	34	3	35
Boxes, paper:						
Total 1927	9	311	215,222	471,338	933,306	461,968
Total 1925	6	268	162,917	336,251	739,250	402,999
Increase or decrease—	3	43	52,305	105,087	194,056	58,969
Per cent increase or decrease	50	16	33	31	26	15
Bread and other baking products:						
Total 1927	61	1,012	1,190,239	3,205,039	6,108,949	2,903,910
Total 1925	51	673	797,077	2,865,952	4,606,242	1,740,290
Increase or decrease—	10	339	393,162	339,087	1,502,707	1,163,620
Per cent increase or decrease—	20	50	50	12	33	65

STATISTICS OF ALL NORTH CAROLINA INDUSTRIES, 1925-1927—Continued

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
Brooms:						
Total 1927	5	33	25,285	94,874	64,232	159,106
Total 1925	5	37	28,502	105,929	72,146	178,075
Increase or decrease—		-4	-3,217	-11,055	-7,914	-18,969
Per cent increase or decrease—		-12	-11	-11	-11	-11
Butter:						
Total 1927	17	46	48,148	798,503	1,013,235	214,732
Total 1925	12	23	27,164	626,163	737,548	111,385
Increase or decrease—	5	20	19,431	151,222	249,943	98,721
Per cent increase or decrease—	42	90	72	25	34	89
Canning and preserving fish and other sea food:						
Total 1927	5	83	30,316	86,630	152,076	65,446
Total 1925	4	68	16,159	65,980	75,317	9,337
Increase or decrease—	1	15	14,157	20,650	76,759	56,109
Per cent increase or decrease—	25	25	87	32	102	601
Canning fruits and vegetables:						
Total 1927	4	34	18,638	72,938	127,936	54,998
Total 1925	Comparative figures are not available.					
Car construction and steam railroads:						
Total 1927	16	4,611	6,369,417	7,209,774	14,447,433	7,237,659
Total 1925	15	4,876	6,365,261	7,800,435	14,993,598	7,193,163
Increase or decrease—	1	-265	4,156	-590,661	-546,165	44,496
Per cent increase or decrease—	7	-5	.06	-8	-3.5	.6
Carriages, wagons and buggies:						
Total 1927	7	134	132,868	229,332	288,024	517,356
Total 1925	9	226	178,693	294,438	292,060	586,498
Increase or decrease—	-2	-92	-45,825	-65,106	-4,036	-69,142
Per cent increase or decrease	-20	-41	-26	-22	-1.5	-12
Caskets and coffins:						
Total 1927	6	199	218,160	655,699	1,350,014	694,315
Total 1925	9	201	199,940	607,177	1,241,524	634,347
Increase or decrease—	-3	-2	18,220	48,522	8,490	59,968
Per cent increase or decrease—	-33	-1	9	8	1	9
Clay products, other than pottery:						
Total 1927	67	1,677	1,199,742	1,449,203	3,834,494	2,385,291
Total 1925	64	1,724	1,212,146	1,246,408	3,849,072	2,602,664
Increase or decrease—	3	-47	-12,404	202,795	-14,578	-217,373
Per cent increase or decrease—			-10	76	-4	-8

STATISTICS OF ALL NORTH CAROLINA INDUSTRIES, 1925-1927—Continued

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
Men's Clothing, work:						
Total 1927	13	1,547	914,305	2,977,296	1,728,769	4,706,065
Total 1925	11	1,051	607,144	2,575,739	1,179,121	3,754,860
Increase or decrease—	2	496	307,161	401,557	549,648	951,205
Per cent increase or decrease—	18	47	57	16	47	25
Coffee roasting:						
Total 1927	4	6	7,740	206,792	286,817	80,025
Total 1925						
Note: This industry was omitted in last census of 1925.						
Concrete Products:						
Total 1927	22	184	155,660	287,366	671,240	383,874
Total 1925	15	197	146,142	310,911	680,672	369,762
Increase or decrease—	7	-13	9,518	-23,545	-9,433	14,112
Per cent increase or decrease—	45	-6	7	-8	-1	4
Confectionery:						
Total 1927	16	221	169,075	763,350	1,227,886	514,536
Total 1925	14	178	135,675	504,942	942,920	437,978
Increase or decrease—	2	43	33,400	258,408	334,966	76,558
Per cent increase or decrease—		24	25	50	35	18
Cooperage						
Total 1927	15	72	49,938	324,567	415,277	90,710
Total 1925	9	32	21,296	179,787	220,237	40,450
Increase or decrease—	6	40	28,642	144,780	195,040	50,260
Per cent increase or decrease—	66	125	133	80	90	125
Copper, tin and sheet iron work:						
Total 1927	13	102	128,249	366,721	683,714	316,993
Total 1925	14	100	114,526	283,378	616,492	333,114
Increase or decrease—	-1	2	13,723	83,343	67,222	-16,121
Per cent increase or decrease—	-7	2	12	30	11	-5
Cordage and Twine:						
Total 1927	9	1,456	915,094	4,113,524	6,520,058	2,406,534
Total 1925	8	1,137	646,515	4,658,202	6,306,284	1,648,082
Increase or decrease—	1	319	268,579	-544,678	213,774	758,452
Per cent increase or decrease—	12½	28	42	-12	3.5	45
Cotton Goods, yarn and woven fabrics over 12 inches wide:						
Total 1927	374	95,809	66,122,495	184,758,069	310,801,860	126,043,791
Total 1925	364	84,139	53,939,704	207,273,961	316,068,931	108,794,970
Increase or decrease—	10	11,770	12,182,791	-22,515,892	-5,267,071	17,248,821
Per cent increase or decrease—	3	14	23	-11	-1.7	16

— STATISTICS OF ALL NORTH CAROLINA INDUSTRIES, 1925-1927—Continued

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
Cotton Small Wares:						
Total 1927	9	161	171,694	420,960	856,515	435,555
Total 1925	5	44	43,627	143,416	255,077	111,661
Increase or decrease—	4	67	128,067	277,544	601,438	323,894
Per cent increase or decrease—	80	150	300	200	245	300
Dyeing and Finishing Textiles:						
Total 1927	17	2,548	2,229,866	13,575,705	19,402,448	5,826,743
Total 1925	10	1,294	999,703	6,006,111	8,510,852	2,504,741
Increase or decrease—	7	1,254	1,230,163	7,569,594	10,491,596	2,922,022
Per cent increase or decrease—	70	100	125	125	125	120
NOTE: These establishments operate chiefly on a contract basis, that is they dye and finish for other establishments. In such cases, total receipts are reported rather than value of products manufactured. However several large plants buy the grey goods and dye and finish the same before marketing. In such cases the cost of the grey goods is reported under "Material" and selling value under "Value of Products."						
Electrical Machinery, apparatus and supplies:						
Total 1927	6	54	50,699	106,900	225,283	118,383
Total 1925	3	32	25,167	25,074	68,735	43,661
Increase or decrease—	3	22	25,532	81,826	156,548	74,722
Per cent increase or decrease—	100	67	100	330	222	175
Fertilizer:						
Total 1927	84	1,842	1,532,364	13,962,784	18,293,687	4,330,903
Total 1925	65	1,796	1,419,240	13,956,428	20,068,546	6,112,118
Increase or decrease—	19	46	113,124	6,356	-1,774,859	-1,781,215
Per cent increase or decrease—	30	2.5	8	.05	-9	-30
Flour and other grain mill products:						
Total 1927	154	562	519,616	15,061,938	17,867,452	2,805,514
Total 1925	115	484	442,624	15,227,237	18,201,542	2,974,305
Increase or decrease—	39	78	76,992	-165,299	-339,090	-153,791
Per cent increase or decrease—	33	16	17	-1	-2	-6
Foundry and Machine Shop Products:						
Total 1927	56	1,049	1,298,442	1,478,745	4,023,352	2,544,607
Total 1925	53	1,009	1,286,122	1,448,864	4,050,441	2,601,577
Increase or decrease—	-3	40	12,320	29,881	-27,089	-56,970
Per cent increase or decrease	-6	4	1	2	.75	-2
Furniture:						
Total 1927	143	14,821	12,417,590	27,702,378	53,551,221	25,848,843
Total 1925	127	13,567	10,752,977	24,944,903	51,208,238	26,263,335
Increase or decrease—	16	1,254	1,664,613	2,757,475	2,342,983	-414,592
Per cent increase or decrease—	12	9.2	15.7	11	4.5	- $\frac{1}{2}$ of 1

STATISTICS OF ALL NORTH CAROLINA INDUSTRIES, 1925-1927—Continued

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
Gas Manufactured, illuminating and heating:						
Total 1927	23	342	381,388	1,295,718	3,116,589	1,820,871
Total 1925	24	387	388,714	990,701	2,884,832	1,894,131
Increase or decrease—	-1	-45	-7,326	305,017	231,757	-73,260
Per cent increase or decrease—	-4	-12	-2	31	8	-4
Gloves and Mittens, cloth or chiefly cloth:						
Total 1927	4	219	91,691	393,002	612,233	218,331
Total 1925	4	222	102,828	277,275	575,431	298,156
Increase or decrease—		-3	-11,137	116,627	36,802	-79,825
Per cent increase or decrease—		-1	-11	42	6	-26
Ice Cream:						
Total 1927	43	325	338,153	1,888,085	3,890,497	2,002,412
Total 1925	30	272	309,105	1,590,407	3,008,919	1,418,572
Increase or decrease—	13	53	29,048	297,678	881,578	583,900
Per cent increase or decrease—	40	18	10	19	30	41
Ice:						
Total 1927	98	540	601,626	874,113	3,803,508	2,929,395
Total 1925	81	560	567,137	841,653	3,216,788	2,375,135
Increase or decrease—	17	-40	34,489	32,460	586,720	554,260
Per cent increase or decrease—	21	-7	6	4	19	23
Knit Goods:						
Total 1927	129	17,430	11,963,107	37,372,944	61,370,220	23,997,276
Total 1925	111	13,727	8,287,238	27,994,889	44,300,819	16,305,930
Increase or decrease—	18	3,703	3,675,869	9,378,055	17,069,401	7,691,346
Per cent increase or decrease—	17	27	44	33	39	41
Leather, tanned, curried and finished:						
Total 1927	11	1,342	1,237,243	12,128,432	16,405,354	4,276,922
Total 1925	11	1,020	878,664	8,232,977	11,042,486	2,899,509
Increase or decrease—		322	358,579	3,895,455	5,362,868	1,467,413
Per cent increase or decrease—		32	40	46	48	50
Lumber and Timber Products:						
Total 1927	596	18,421	12,935,355	16,143,230	38,763,954	22,620,724
Total 1925	515	17,787	12,900,303	15,914,569	38,080,932	22,166,363
Increase or decrease—	81	634	35,052	228,661	683,022	454,361
Per cent increase or decrease—	16	4	.3	2	2	2

STATISTICS OF ALL NORTH CAROLINA INDUSTRIES, 1925-1927—Continued

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
Lumber, Planing Mills:						
Total 1927	161	2,980	2,576,663	9,517,369	14,623,698	5,106,329
Total 1925	154	2,982	2,636,351	10,110,308	15,981,683	5,871,375
Increase or decrease—	7	—2	—59,688	—592,939	—1,357,985	—765,046
Per cent increase or decrease—	5	— .1	—2	—5	—8	—13
Marble, Granite, Slate, etc.:						
Total 1927	32	940	1,266,372	840,594	2,965,671	2,125,077
Total 1925	27	751	931,715	649,644	2,357,999	1,708,355
Increase or decrease—	5	189	334,657	106,688	607,672	416,722
Per cent increase or decrease—	20	25	36	16	26	24
Mattress and Bed Springs:						
Total 1927	17	252	221,904	824,083	1,454,879	630,796
Total 1925	17	226	187,645	943,510	1,484,610	541,100
Increase or decrease—		26	34,059	—119,427	29,731	89,696
Per cent increase or decrease—		12	18	—7	20	16
Minerals and Earths, treated:						
Total 1927	12	367	283,143	596,790	1,321,828	725,038
Total 1925	8	285	197,996	332,366	868,414	536,048
Increase or decrease—	4	82	85,147	264,424	453,414	188,990
Per cent increase or decrease—	50	29	44	80	52	35
Mirrors, framed and unframed:						
Total 1927	9	198	209,970	1,783,939	2,465,928	681,989
Total 1925	6	176	177,916	2,102,769	2,811,842	809,073
Increase or decrease—	3	22	32,054	—318,830	—445,914	—127,084
Per cent increase or decrease—	50	14	19	—15	—16	—28
Motor vehicles, bodies and parts:						
Total 1927	15	275	304,236	381,042	491,836	872,878
Total 1925	10	248	288,101	333,538	569,634	903,172
Increase or decrease—	5	27	16,135	47,504	—67,798	—30,294
Per cent increase or decrease—						
Nuts, processed:						
Total 1927	9	372	127,080	3,335,638	3,833,673	498,035
Total 1925	Figures not available					
Cotton Seed oil cake and meal:						
Total 1927	53	1,418	1,067,922	13,962,245	17,612,879	3,650,634
Total 1925	51	1,426	862,933	14,776,990	17,484,244	2,707,254
Increase or decrease—	2	—8	204,989	—814,745	128,635	943,380
Per cent increase or decrease—	4	—5	24	—6	1	35

STATISTICS OF ALL NORTH CAROLINA INDUSTRIES, 1925-1927—Continued

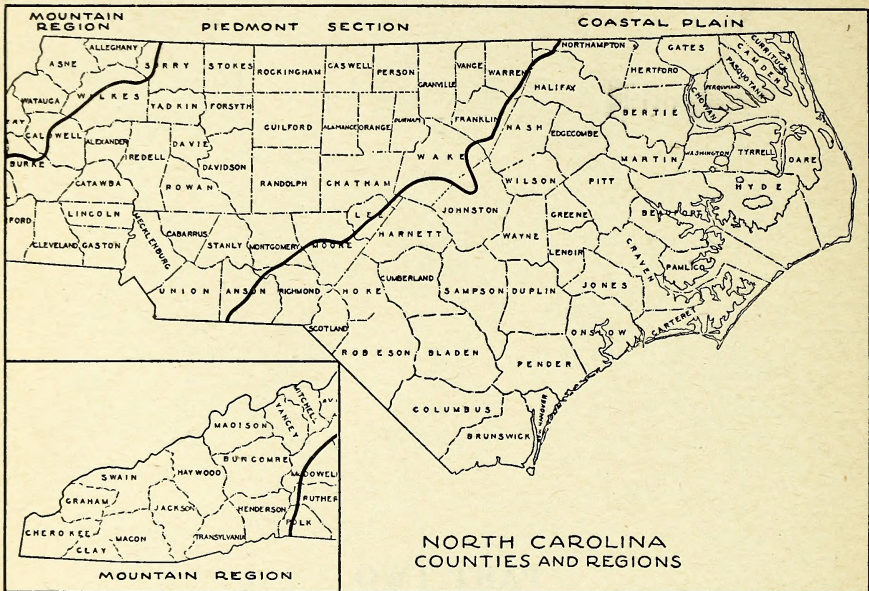
Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
Patent Medicine and Compounds:						
Total 1927	12	97	79,744	574,728	2,002,561	1,427,833
Total 1925	8	110	80,152	1,525,366	3,052,186	1,526,820
Increase or decrease—	4	—13	—408	—950,638	—1,049,625	—98,987
Per cent increase or decrease—	50	—12	—½ of 1	—60	—34	—6
Paving Material, not brick:						
Total 1927	11	814	676,093	923,957	1,131,308	2,055,265
Total 1925	12	595	455,771	359,935	932,771	1,292,706
Increase or decrease—	—1	219	220,322	564,022	198,537	762,559
Per cent increase or decrease—		34	50	1.57	21	59
Printing, book and job:						
Total 1927	71	695	1,016,559	1,024,239	3,298,484	2,274,245
Total 1925	73	704	1,019,839	1,040,339	3,302,934	2,262,595
Increase or decrease—	—2	—9	—3,280	—16,100	—4,450	11,650
Per cent increase or decrease—	—3	—1	— .33	—1.5	— .01	.5
Printing and Publishing, News and Periodicals:						
Total 1927	157	1,058	1,819,469	1,955,427	8,960,742	7,005,315
Total 1925	145	924	1,598,835	1,754,813	7,697,496	5,942,683
Increase or decrease—	12	134	220,634	200,614	1,263,246	1,062,632
Per cent increase or decrease—	8	15	14	11	16	18
Shirts, men's:						
Total 1927	6	309	136,159	410,244	670,577	260,333
Total 1925	Figures not available.					
Tanning Materials, dye stuff, etc.:						
Total 1927	7	234	156,927	785,708	1,277,273	491,565
Total 1925	6	198	150,956	769,750	1,097,131	327,381
Increase or decrease—	1	36	5,971	15,958	180,142	164,184
Per cent increase or decrease—	16½	18	4	2	16	50
Textile Machinery and Parts:						
Total 1927	20	349	425,495	680,215	2,230,338	1,550,123
Total 1925	13	263	297,267	411,345	1,339,133	927,788
Increase or decrease—	7	86	128,228	268,870	891,205	622,355
Per cent increase or decrease—	54	33	43	65	66	67
Tobacco, chewing, smoking and snuff:						
Total 1927	6	1,892	961,428	7,146,784	21,221,482	14,074,698
Total 1925	9	2,582	1,466,800	8,808,664	30,339,494	21,530,830
Increase or decrease—	—3	—690	—505,372	—1,661,880	—9,118,012	—7,456,132
Per cent increase or decrease—	—33½	—25	—33½	—20	—30	—33½

STATISTICS OF ALL INDUSTRIES 1925-1927—Continued

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power	Total Value Products	Value Added By Manufacture
Tobacco, cigars and cigarettes:						
Total 1927	15	14,087	11,583,647	117,566,134	392,052,632	274,486,498
Total 1925	12	13,133	10,533,415	104,587,162	312,736,113	108,148,951
Increase or decrease—	3	954	1,050,232	12,978,972	79,316,519	166,337,547
Per cent increase or decrease—	25	7	10	12	25	160
Wood, turned and shaped:						
Total 1927	11	158	128,502	239,031	530,732	291,701
Total 1925	11	165	124,230	169,241	446,222	276,981
Increase or decrease—		-7	4,272	69,790	84,510	14,720
Per cent increase or decrease—						
Woolen Goods:						
Total 1927	7	1,158	1,028,981	3,320,912	2,189,127	5,510,039
Total 1925	8	832	638,055	3,359,450	1,394,946	4,754,396
Increase or decrease—	-1	326	390,926	-38,538	794,181	755,643
Per cent increase or decrease		39	61	-1	57	16
All Other Industries:						
Total 1927	144	7,797	8,690,206	38,983,321	59,725,848	20,742,527
Total 1925	96	6,858	7,464,807	43,922,144	66,986,400	23,064,256
Increase or decrease—	Not same industries as in 1925.					

PART TWO

NORTH CAROLINA COUNTY AND REGIONAL MAP



FIGURES, ABBREVIATIONS, ETC.

Note: Data used in text are the latest which are authentic and available, to cover all counties at time of going to press and are as follows:

1. **Population:** To standardize the population figures for all counties, the latest estimate by the U. S. Bureau of the Census has been used. No further estimate will be released by the Bureau before the figures of 1930 decennial census are available, which are expected to show increases over figures used herein in many of the counties.
2. **Railroads:** Abbreviations used are: Southern—"So.," Atlantic Coast Line—"A. C. L.," Seaboard Air Line—"S. A. L.," Winston-Salem Southbound—"W. S. So.," Norfolk & Western—"N. W.," Norfolk Southern—"N. So.," Carolina Southern—"C. So.," Virginia & Carolina So.—"V. C. So.," Carolina & Northwestern—"C. No.," Yadkin River Railroad—"Y. R. R.," Atlantic & Yadkin—"A. Y.," Louisville & Nashville—"L. N.," Aberdeen & Rockfish—"A. R.," Virginia & Carolina So.—"V. C. So.," Durham & Southern—"D. So.," Piedmont & Northern—"P. N.," Carolina, Clinchfield & Ohio—"C. C. O.," East Carolina R. R.—"E. C. R.," High Point R. R.—"H. R. R.," Carolina & Tenn. So.—"C. T. So.," Linville River R.—"L. R. R.," Black Mountain R.—"B. M. R."
3. **Manufactures:** Data for manufacturing industries are taken from the 1927, Biennial Census of Manufactures of the U. S. Bureau of the Census and no manufacturing establishment is included which did not produce goods to the value of \$5,000.00 or over in the calendar year of 1927.
4. "‡," indicates county-seat; "*, " Principal distributing center.

MANUFACTURES BY COUNTIES FOR 1927

Counties	Number of Establish- ments	Wage Earners	Total Wages	Material Fuel and Power	Total Value Products	Value Added By Manufacture
Alamance	86	6,227	\$4,630,989	\$14,920,672	\$25,015,180	\$10,094,508
Alexander	19	798	486,602	1,441,709	2,442,296	1,000,587
Alleghany	2	28	16,000	11,375	60,310	48,935
Anson	20	775	530,336	2,277,198	3,382,678	1,105,480
Ashe	12	108	71,844	83,580	252,862	169,282
Avery	9	123	91,811	110,583	330,529	219,946
Beaufort	32	1,174	848,570	2,220,491	4,106,008	1,885,517
Bertie	14	394	233,245	381,171	784,482	403,311
Bladen	21	1,128	631,633	1,687,943	2,858,560	1,170,617
Brunswick	13	235	190,520	856,370	1,227,102	470,732
Buncombe	89	3,494	3,779,256	10,271,003	19,283,135	9,012,132
Burke	31	3,431	1,901,371	8,603,297	12,935,268	4,331,971
Cabarrus	34	9,467	6,546,798	17,231,666	30,358,962	13,127,296
Caldwell	66	3,469	2,257,628	7,922,817	13,311,301	5,388,484
Camden	(We have no manufacturing establishments listed in Camden County)					
Carteret	21	188	168,451	375,008	995,446	620,438
Caswell	2	9	8,890	5,340	25,784	20,444
Catawba	89	5,437	3,594,219	9,623,251	17,040,001	7,416,750
Chatham	34	834	493,965	1,564,783	2,595,089	1,030,306
Cherokee	10	526	303,986	1,004,479	1,769,946	765,467
Chowan	15	653	360,646	3,283,199	4,205,519	922,320
Clay	4	26	11,750	7,605	36,010	28,510
Cleveland	52	4,234	3,052,108	9,474,044	15,366,573	5,892,529
Columbus	25	1,735	1,113,641	1,829,315	3,598,173	1,768,858
Craven	39	2,168	1,499,976	2,710,680	5,357,321	2,646,641
Cumberland	40	2,155	1,264,537	2,293,740	7,064,824	2,771,084
Currituck	3	50	22,139	16,827	56,765	39,938
Dare	3	19	10,520	87,538	122,103	34,565
Davidson	69	5,564	4,477,753	11,945,890	20,389,086	8,443,196
Davie	7	835	550,322	1,669,657	2,839,149	1,169,492
Duplin	15	649	458,920	302,491	1,120,584	818,093
Durham	62	8,846	6,040,955	36,971,405	106,865,989	69,894,584
Edgecombe	36	2,313	2,471,045	5,469,978	8,871,238	3,401,260
Forsyth	103	18,712	15,097,450	102,396,261	302,571,980	200,175,719
Franklin	13	653	437,102	1,577,983	2,329,558	751,575
Gaston	125	18,008	13,155,249	39,514,928	63,425,280	23,910,352
Gates	4	231	126,793	98,484	276,729	178,245
Graham	5	210	245,190	83,077	438,409	355,332
Granville	22	365	263,355	827,280	1,402,746	575,466
Greene	3	24	9,680	14,650	50,540	35,890
Guilford	200	16,554	14,457,664	46,180,891	79,768,852	33,587,971
Halifax	41	3,154	2,418,766	6,282,149	12,759,813	6,477,664
Harnett	33	2,169	1,495,135	4,849,009	8,673,420	3,824,411
Haywood	28	2,228	2,264,464	7,382,695	12,197,180	4,814,485
Henderson	26	1,112	720,742	1,611,944	3,091,575	1,479,631
Hertford	10	194	167,980	175,418	377,948	202,530
Hoke	9	471	126,709	622,712	881,828	259,116
Hyde	(We have no manufacturing establishments listed in Hyde County)					
Iredell	67	3,816	3,035,360	9,334,038	15,839,054	6,505,016
Jackson	21	991	771,171	1,885,563	3,258,191	1,372,628
Johnston	31	1,021	639,774	2,756,200	4,200,628	1,444,428
Jones	4	78	52,897	111,176	241,264	130,088
Lee	28	625	483,995	1,361,807	2,400,907	1,041,100
Lenoir	29	619	394,371	1,596,420	2,463,252	866,832
Lincoln	32	1,794	1,225,327	3,367,776	5,425,726	2,057,950
Macon	12	129	112,964	119,564	408,444	288,880
Madison	7	85	55,816	157,784	259,989	101,205
Martin	9	49	27,934	78,575	173,308	94,733

ALL MANUFACTURES BY COUNTIES FOR 1927—CONTINUED

Industry	Number of Establish- ments	Wage Earners	Total Wages	Material, Fuel and Power-	Total Value Products	Value Added By Manufacture
McDowell	25	2,495	1,563,313	4,777,439	8,001,835	3,224,389
Mecklenburg	150	8,122	8,013,982	33,483,468	52,851,356	19,367,889
Mitchell	16	308	249,506	208,858	979,788	698,930
Montgomery	21	771	521,701	1,741,716	2,709,063	967,347
Moore	34	485	329,506	748,633	1,504,030	755,397
Nash	22	860	591,072	1,979,738	3,364,694	1,384,956
New Hanover	60	2,295	2,301,303	7,072,478	11,912,234	4,839,756
Northampton	6	277	119,286	83,378	273,582	190,204
Onslow	5	128	101,915	96,054	294,046	197,992
Orange	18	1,131	771,497	1,679,004	3,005,719	1,326,715
Pamlico	4	26	9,019	28,025	76,854	48,829
Pasquotank	36	1,229	950,404	1,838,285	3,710,086	1,871,801
Pender	13	478	272,238	202,201	573,683	371,482
Person	8	695	402,194	1,477,291	2,192,103	714,812
Perquimans	7	318	250,704	1,199,276	1,761,621	562,345
Pitt	29	492	384,516	1,595,888	2,378,864	782,976
Polk	14	399	250,434	1,085,346	1,679,307	593,961
Randolph	61	2,656	1,746,699	5,917,489	9,545,674	3,628,185
Richmond	33	3,341	2,611,871	6,214,387	10,915,158	4,700,771
Robeson	38	2,087	1,136,800	3,862,137	6,069,527	2,207,390
Rockingham	38	5,917	5,029,817	22,576,930	69,434,742	46,857,812
Rowan	64	5,860	5,336,668	11,813,775	21,574,417	9,760,642
Rutherford	37	4,193	3,080,584	9,652,832	16,349,311	6,696,479
Sampson	21	475	261,190	463,838	1,012,379	548,541
Scotland	21	1,004	691,370	3,489,575	5,129,979	1,640,404
Stanley	(Cannot publish statistics for this county without disclosing operations of an establishment.)					
Stokes	11	107	91,047	157,381	513,554	356,173
Surry	45	2,875	2,388,665	4,620,484	8,890,227	4,269,743
Swain	7	587	514,097	396,554	1,254,115	857,561
Transylvania	12	806	665,560	2,238,552	3,552,881	1,314,329
Tyrrell	4	28	11,700	31,183	52,968	21,785
Union	27	922	634,282	2,502,922	3,962,452	1,459,530
Vance	20	1,839	1,091,891	5,062,911	7,461,980	2,399,069
Wake	69	2,503	2,404,681	5,439,301	10,566,025	5,126,724
Warren	20	270	148,476	493,800	846,260	352,460
Washington	5	311	268,864	403,261	841,051	437,790
Watauga	8	62	30,278	17,259	83,687	66,428
Wayne	44	1,994	1,532,711	4,606,446	7,897,469	3,291,023
Wilkes	40	1,248	785,909	3,827,669	5,981,178	2,153,509
Wilson	16	555	455,676	2,709,781	3,918,461	1,208,680
Yadkin	12	52	32,018	184,835	291,479	106,644
Yancey	11	101	47,987	123,604	249,662	126,058

FACTS AND FIGURES OF NORTH CAROLINA'S 100 COUNTIES

State statistics show: Population, 2,938,000; area, 52,286 square miles, containing 3,600 square miles fresh and salt water area; elevation 0 to 6,711 feet; value real property (estimated), \$6,000,000,000; bank resources, \$550,000,000; output industry, 1927, \$1,155,000,000; fourth state in water power; sixth state in value farm products; over \$53,000,000 timber products; 284 native minerals; four-fifths debt-free homes.

While cities are important units yet the county is the typical American subdivision of a state. This is especially true of North Carolina, a great state with no cities having over 100,000 population. In the present age of good roads and motor transport, it is not essential that one live or do business within the corporate limits of a city and this tendency to diffusion, along with diversification, is growing. It is often impossible to include in a report of a town or city all physical conditions and activities located within the "metropolitan area", which properly belong to the activities of the town, as so many of these things are situated outside the official city limits. It is for these reasons that county conditions become more important and are often first considered, even before the facts and figures of the towns or cities are studied.

The United States Census of Manufactures releases some statistics on cities of 30,000 or over, yet no such consecutive figures as to counties or other geographic divisions of a state are available for study or comparison. The table of figures of the chief manufactured products of each of the one hundred counties of North Carolina, as herein included, are, therefore, unique. It is believed these data will be valuable locally for analysis, while also useful at large for those who seek statistical or industrial facts about North Carolina resources and industries in certain localities.

For each county is shown: The general data and map of the county; data on forest resources; mineral resources; water products (where existing); water resources and power; farm products; and statistics of the county's industries.

Each county table of manufactures shows the total number of establishments, whose products amounted to \$5,000 or over, in 1927, and the number in each leading industry and those classed as miscellaneous. It should be noted that under the heading "miscellaneous" are sometimes included large establishments which, on account of their size, might disclose operations of an individual establishment. Such publication is against the rules and practice of the Department, unless the establishment does not object.

Besides the number of establishments operated in 1927 in each county the table shows: number of wage earners and amount of their wages; cost of material, fuel and power used; total value of the products; and value added by manufacture.

ALAMANCE COUNTY

In Northern Piedmont; population, 35,400; area, 314,880 acres; topography, rolling, low mountains south; waters, Cape Fear, Haw rivers; railroads, Southern; buslines, Carolina; highways, Nos. 10, 62, 103, 144; telegraphs and telephones; incorporated cities and towns, *Burlington, Mebane, Haw River, Elon College, ‡Graham.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All industries	86	6,227	\$ 4,630,989	\$14,920,672	\$25,015,180	\$10,094,508
Cotton Goods	19	3,104	2,176,733	6,335,431	10,531,335	4,195,904
Knit Goods	27	1,892	1,390,596	5,966,443	9,409,518	3,443,075
Other Textile Products	5	538	434,994	660,750	1,385,702	724,952
Food and Kindred Products	12	44	4 6,144	501,305	720,069	218,764
Forest Products	12	472	415,443	1,022,799	2,139,093	1,116,294
*Miscellaneous Industries	11	177	167,079	433,944	829,463	395,519

*Includes Printing and Publishing, Paper Goods, Mattresses, Stone and Clay Products, etc.

Forest Products.—The forest area is approximately 176,360 acres, comprising 56 per cent of the total land area. More than 54 per cent of the forest area is farm woodland; including some 14,452 acres of woodland pasture. The principal merchantable species are second growth pine 70 per cent, oak 20 per cent.

It is estimated that there still remains a total stand of 40,000,000 board feet of saw timber which is fairly accessible by road and rail.

The forests of Alamance were probably at one time all of the hardwoods and pine type. The old growth pine is, however, largely cut out, and the original forest is now pure hardwood although a small amount of second growth pine is sometimes mixed with it. Most of the land can be used for agriculture when the need for it arises.

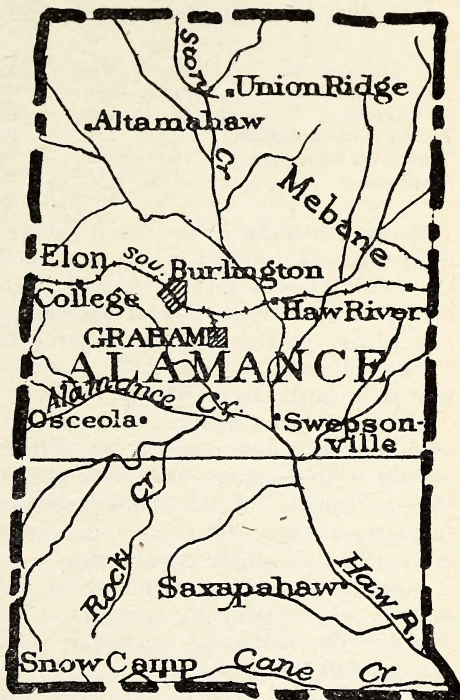
Some 40 sawmills produce about 10,000,000 board feet of lumber per annum. A considerable quantity of cordwood ties and veneers are also produced each year. The estimated stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—Commercial minerals in this county are brick clays. Near Graham and Mebane these clays are used for making brick. Just south of Burlington, a pyrophyllite deposit occurs but due to distance from railroad it has not been developed commercially as yet. Granites of irregular color and texture are also found in this vicinity, and about three miles north a biotite granite occurs. Near Altamahaw and Ossipee a hard, fine-grained, dark-gray syenite-porphyry is found at number of outcrops. This stone can be used for a great many purposes. Total value of the mineral production in the county for 1926 was \$46,500.

Water Resources and Power.—Waters: Haw river; Stony, Toms, Jordan, Mill, Haw, Mary's, Stinking Quarter, Great and Little Alamance, Traverse, Buttermilk, and other creeks; Burlington Municipal Water

Supply lake on Stony creek. Water: Plentiful in point of available sources; chemical and physical quality excellent, though filtration is generally required for domestic use. Power: Comprehensively served by Duke Power Co., transmission system. Two 100,000-volt circuits cross the county roughly parallel to the Southern railroad. Feeder lines furnish power locally to the several sections. A 700 h. p. steam plant, property of the company, is available in Burlington for emergency use. Numerous small power sites are developed by mill interests on the Haw River to supply local needs. Undeveloped horsepower estimated at 1,000.

Agriculture Products. — This county forms the border of the cotton and the "old tobacco" belts. The Northern portion claims some of the best quality tobacco in the state which has averaged high prices for this reason. It is near the eastern limits of the wheat belt. Its report of 1,072 acres of field vegetables in 1927 shows active interest in its table supplies. It had over 100,000 bearing fruit trees. A little over one-fourth of its cultivated area is worked by tenant labor. It reported about 3,000 colonies of bees, over 7,000 hogs disposed of, 87,000 hens, 5,000 milch cows; 800 equivalent acres in homegardens, and 192 farm tractors in use.



County Products	*84,548 Acreage	Yield Per Acre	Production or* Number	Value Total	Value Per Acre
Corn	28,611	23	658,053	\$ 559,345	\$ 19.55
Wheat	16,161	11	177,771	245,324	15.18
Tobacco	8,383	633	5,306,439	1,326,610	188.00
Oats	4,282	16	68,512	53,439	12.48
Hay (Including Meadow)	8,619	1.1	9,869	222,053	25.00
Horses and Mules*			5,136	529,776	
Cattle*			6,418	302,930	
Hogs*			6,266	73,312	

ALEXANDER COUNTY

In Northwest Piedmont; population, 12,600; area, 184,960 acres; topography, hilly, mountains in northwest; waters, South Yadkin, Catawba, Little rivers; railroads, Southern; buslines, Call; highways, Nos. 16, 67, 90; telegraphs and telephones; incorporated cities and towns, Taylorsville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	19	798	\$486,602	\$1,441,709	\$2,442,296	\$1,000,587
Textiles and their products	7	648	393,858	1,186,845	1,984,626	797,781
Wood Using Industries	6	64	39,550	63,900	166,350	102,450
Miscellaneous	6	86	53,194	190,964	291,320	100,356

Forest Products.—The forest area is approximately 116,384 acres, comprising 63 per cent of the total land area. More than 65 per cent of the forest area is farm woodland; including some 9,281 acres of woodland pasture. The principal merchantable species are pine 75 per cent, oak 10 per cent and poplar 5 per cent.

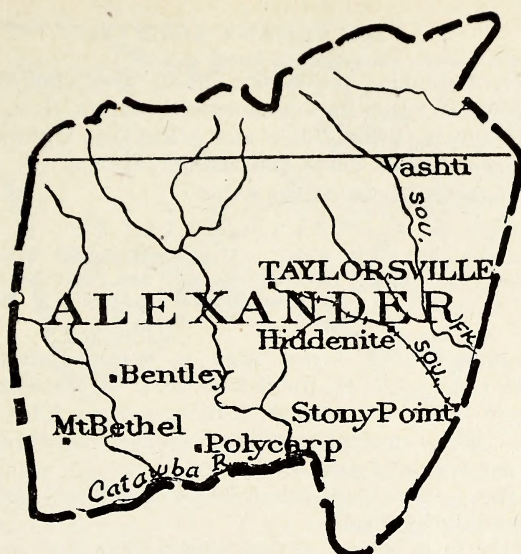
The estimated present total stand of 100,000,000 board feet of saw timber is fairly accessible by roads.

The pines predominate; shortleaf pitch and spruce pine are abundant with a little white pine in the northern part. No large timber tracts remain in the county. Outside of the acreage owned by the Duke Power Co., practically all the timberlands are in farms. It is estimated by lumbermen that there is in the county approximately three or four million feet of virgin growth pine.

Some 20 sawmills produce about 5,600,000 board feet of lumber per annum. A considerable quantity of ties, and pulp wood are also produced. The estimated stumpage value of the timber cut annually is around \$40,000.

Mineral Products.—The mineral hiddenite occurs near the town of Hiddenite in the east-central part of the county, which is the only occurrence of this mineral in the State. Emerald is found with the Hiddenite. At Rocky Face Mountain, 4 miles north, a deposit of granite-gneiss occurs, covering about 1,000 acres. This rock is admirably suited for curbing and blocks for street purposes, as well as for crushed stone. Near Taylorsville other gneissic areas occur. Value of the mineral production in the county for 1926 was \$106,583.

Water Resources and Power.—Waters: Catawba, Lower Little, Middle Little, and South Yadkin rivers; Wallace, Mill, Glade, Elk Shoal, Muddy Fork, Grassy, Lambert Fork, North Fork, Duch, and other creeks; part of Oxford Shoals and Lookout Shoals lakes. Waters: Excellent unappropriated large sources plentiful; chemical quality, excellent; physical quality, excellent except for moderately high turbidities in larger streams. Power: A Duke Power development of 56,000 h. p. at Oxford Shoals, (partly in Catawba county), together with two smaller developments totalling 640 h. p. on the Middle and Lower Little rivers, give an installation in the county of 56,640 h. p. These, with their connection to the



high tension transmission system of the State, make an unlimited amount of power available. Service is given at present from a trunk line running north from the Lookout Shoals plant via Taylorsville to North Wilkesboro.

Agricultural Products.—This county is linked up with two main highways entering from three directions, and has on the north the Brushy Mountain range, with its fine apple orchards. While its soil is not naturally fertile it responds readily to good feeding and treatment. It stands well in most of the food and feed crops grown in the Piedmont area. The drying of fruits is quite common. Tobacco is a relatively minor crop, with cotton planted much more extensively. About 23 per cent of the land area is in cultivation, with wheat forming an important item. With varied soil types, the opportunities for agricultural developments are good.

County Products	43,159 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	14,457	19	274,683	\$227,987	\$15.07
Wheat	9,791	10	97,910	140,990	14.47
Cotton	4,933	239	2,467	229,902	46.60
Rye	3,417	9	30,753	37,211	10.89
Hay (Including Meadow)	2,135	.8	1,641	36,102	17.60
Horses and Mules*			2,339	256,965	
Cattle*			3,451	162,887	
Hogs*			2,636	30,841	

ALLEGHANY COUNTY

In Northern Mountain; population, 7,403; area, 149,760 acres; topography, high plateau, Peach Bottom mountain; waters, New, Little and South Fork rivers; buslines, Miller, Elkin and Alleghany; highways, Nos. 26, 67, 69, and 18; incorporated cities and towns, †Sparta.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	2	28	\$16,000	\$11,375	\$60,310	\$48,935

Forest Products.—The forest area is approximately 61,512 acres, comprising 41 per cent of the total land area. More than 75 per cent of the forest area is farm woodland; including some 1,901 acres of woodland pasture. The principal merchantable species are oak 50 per cent, chestnut 30 per cent and poplar 10 per cent.

The estimated present total stand, 80,000,000 board feet of saw timber, is fairly accessible by roads.

There is very little second growth timber that is as yet salable. Most of the merchantable timber is mature and overmature. The greater part of the better grades of lumber is manufactured from the red and white oaks. In the eastern part of the county white pine is resetting naturally where conditions are favorable. As long as fire is kept out the stands of this species will rapidly increase.

Some six sawmills produce about 2,650,000 board feet of lumber per annum. The estimated stumpage value of the timber cut annually will not exceed \$20,000.

Mineral Products.—A belt of magnetic iron ore is found in the extreme northwest corner of the county, also copper. Near Sparta is a very good grade of manganese ore. In the southern part of the county, along the Wilkes county line, occur large residuals of granite but, due to lack of transportation facilities, they are not worked commercially. Value of the mineral production in the county for 1926 was small.

Water Resources and Power.—Waters: South Fork, New (short stretch), and Little rivers; Elk, Piney, Meadows Fork, Brush, Crab, and othr creeks. Water: Surface supplies abundant; typical excellent mountain water; chemical quality, exceptionally good; physical quality, very superior. Power: Available in Sparta to some extene form development of Little river. Estimates are that hydro-electric developments of that section of the New river, forming the boundary line between Alleghany and Ashe counties, would justify an installation of 18,000 to 20,000 h. p. and it is roughly estimated that 2,500 h. p. could be developed on Little river. Activities of power companies give promise of some development in the near future.

Agricultural Products.—Here is good pasturage and many highly bred cattle and sheep. With the establishment of good roads in the counties, east and west of the Blue Ridge, intercourse and trade is increasing rapidly between these counties. This county has over 50 per cent of



its cultivated area in hay crops, which does not include meadows and pastures which are improved lands but seldom cultivated. There are 82,755 fruit trees, of which 69,311 are apples. Corn, rye, wheat and oats lead in grains but this is one of the three important buckwheat producing counties in North Carolina.

County Products	19,219 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn (grain).....	6,303	24	151,272	\$163,374	\$25.92
Wheat	2,478	11	27,258	38,979	15.73
Oats	2,193	25	54,825	33,443	15.25
Rye	4,707	11	51,707	60,061	12.76
Hay (Inc. Meadow).	9,586	.9	8,176	185,350	20.40
Buckwheat	1,897	14	25,261	25,261	14.00
Horses and Mules*			1,812	167,244	
Cattle*			7,220	340,784	
Sheep*			10,482	134,339	

ANSON COUNTY

In Southeast Piedmont; population, 30,300; area, 355,840 acres; topography, northwest level, southeast sandhills; waters, Yadkin, Rocky rivers; railroads, A. C. L., Seaboard, W. S. So.; buslines, Queen City, Albemarle-Salisbury-Wadesboro; highways, Nos. 20, 80, 515; telegraphs and telephones; incorporated cities and towns, Ansonville, Lilesville, Morven, Polkton, *‡Wadesboro, McFarlin.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	20	775	\$530,336	\$2,277,198	\$3,382,678	\$1,105,480

Textiles and Lumbering are chief industries.

Forest Products.—The forest area is approximately 313,136 acres, comprising 59 per cent of the total land area. More than 47 per cent of the forest area is farm woodland; including some 18,009 acres of woodland pasture. The principal merchantable species are loblolly and shortleaf pine 85 per cent, and oak 10 per cent.

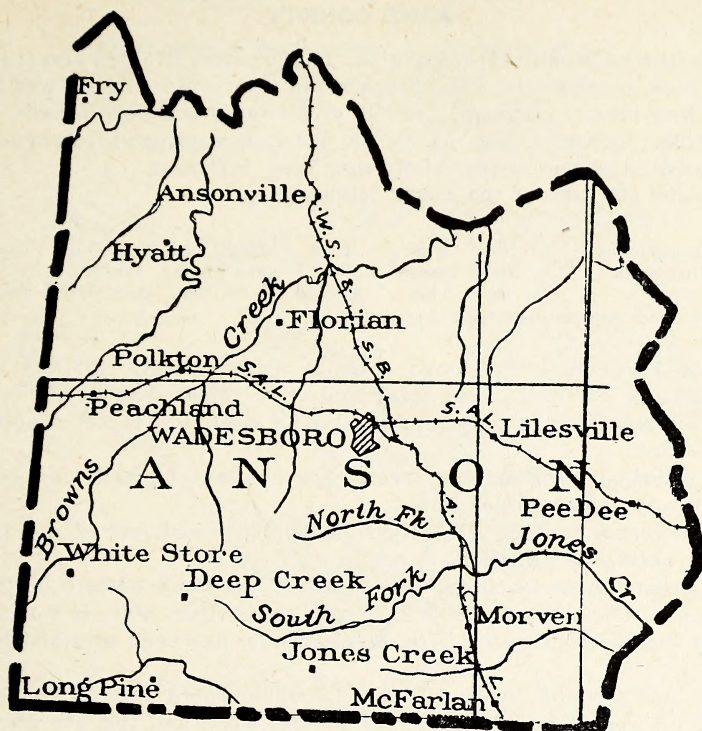
The estimated present total stand of 170,000,000 board feet of saw timber is fairly accessible by roads.

A transition county, longleaf forest occupying the southeastern townships, shortleaf pine and hardwoods the northwestern part, and loblolly pine the large intermediate belt. Loblolly also comprise 99 per cent of the second growth in the longleaf region.

Some forty sawmills produce about 48,000,000 board feet of lumber per annum. A considerable number of ties are also cut. The estimated stumpage value of the timber cut annually is around \$240,000.

Mineral Products.—Along the Yadkin river there are large deposits of gravel which, when washed, is suitable for concrete work. Between Anson and Richmond counties is a large granite area approximately 14 miles wide and just east is a large area of sandstone. Some large exposures of granite occur near Lilesville and large dikes of basic intrusive rocks also occur in the eastern part of the county. Mineral production in the county for 1926 amounted to \$302,324.

Water Resources and Power.—Waters: Yadkin and Rocky rivers; Lanes, Brown, Cribs, Buffalo, Goulds Fork, Cedar, Savannah, Jones, South Fork Jones, North Fork Jones, Dead Fall, and other creeks; Blewett's Falls lake. Water: Surface water supplies, abundant in point of large sources available; chemical quality, considered good; physical quality of small stream water, good, and large streams, good except for turbidity. Power: Carolina Power and Light Co., transmission line crosses central section of county in a westward direction from Blewett's Falls hydro-electric plant of 32,150 h. p. on Yadkin river. Route of line is generally parallel to Seaboard Air Line railroad. Western terminus is at Polkton. Southern section is served by line running south from vicinity of Lilesville. Undeveloped water power is estimated at Buchanan Falls on Yadkin river in amount 50,000 h. p.



Agricultural Products.—While located in the primary cotton belt of the State, this county has a soil varying from the red clays of the north to the sandy loams of the south. Its crops vary from small grains to cotton. About 36 per cent of the land area is under cultivation. The more intensive farming area is in the southern part of the county. 70 per cent of the land area is cultivated by tenants. As with most cotton counties, heavy commercial fertilization is employed. Cotton ginnings for 1927 showed 27,929 bales, as compared with 33,503 the previous year.

County Products	101,455 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	53,897	220	24,806	\$2,336,093	\$43.34
Corn	28,321	22	623,062	560,756	19.80
Oats	11,287	17	191,879	143,909	12.75
Wheat	5,983	11	65,813	90,822	15.18
Cow Peas	1,416	13	18,408	29,453	20.80
Horses and Mules*			5,545	631,951	
Cattle*			4,545	214,524	
Hogs*			4,952	57,938	

ASHE COUNTY

In Northwest Mountain; population, 22,300; area, 273,280 acres; topography, high, south border Blue Ridge mountains; waters, North and South Forks, New rivers; railroads, Norfolk & Western; buslines, Woodie, Bowman, Miller; highways, Nos. 16, 68, 69, 681; telegraphs and telephones; incorporated cities and towns, †Jefferson, West Jefferson.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	12	108	\$71,844	\$83,580	\$252,862	\$169,282
Lumbering is principle industry.						

Forest Products.—The forest area is approximately 103,523 acres; comprising 38 per cent of the total land area. More than 80 per cent of the forest area is farm woodland; including some 19,934 acres of woodland pasture.

The principal merchantable species are chestnut 50 per cent, oak 25 per cent and poplar 10 per cent.

The estimated present stand 90,000,000 board feet of saw timber is fairly accessible by roads.

The larger timber tracts are found only in the south-western portion of the county. It seems probable that oak, rather than pine, is destined to succeed the chestnut which here, as elsewhere, has been attacked by the blight.

Some five sawmills produce about 3,350,000 board feet of lumber per annum. A considerable quantity of extract wood and ties are also produced. The estimated stumpage value of the timber cut annually is around \$30,000.

Mineral Products.—Very good deposits of asbestos are found in the southwest section of the county. Near the New River, in the southeast part of the county, copper ore, as malachite, chrysocolla and chalcopyrite, occurs. There are outcrops of silicious magnetites in a belt extending from Little Horse Shoe creek northwestward to the Virginia line. A very good deposit of soapstone occurs near Baldwin. The magnetic iron ores contain high percentages of manganese. Total value of the mineral production in the county for 1926 was \$10,305.

Water Resources and Power.—Waters: North Fork, South Fork, and Main New rivers; Grassy, Hilton, Beaver, Horse, Big Laurel, Little Laurel, Three Top, Naked, Mulberry, and other creeks; Crumpler and Shatley, and possibly other mineral springs. Water: Abundant in number of sources and quantity; chemical and physical qualities, exceptionally excellent even as mountain water. Mineral spring water at Crumpler and Shatley Springs have been developed by considerable patronage, and hotel facilities are available. Power: Undeveloped waterpower estimated to exist on North Fork New river in amount, 1,500 h. p., and on the South Fork and Main New river in amount 29,000 h. p. (partly in Alleghany county). Indications are that some of this power will be developed in the near future.



Agricultural Products.—This “blue grass” area has several head of cattle and sheep on every farm; over 16,000 sheep, which is more than any other county in the State; 162,000 bearing fruit trees makes this county important in this respect. Its apple crop amounted to approximately 178,000 bushels in 1925. Buckwheat is important, and the hay crops, exclusive of meadows and pastures, occupy 45 per cent of the one-fifth of the county’s area which is cultivated. Rye is the most important small grain, although corn occupies over one-third of the cultivated land.

County Products	36,312 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn (grain)	14,700	26	382,200	\$405,132	\$27.56
Wheat	5,866	11	64,526	95,498	16.28
Oats	5,034	18	90,612	66,147	13.14
Rye	5,621	9	50,589	61,213	10.89
Hay (Including Meadow)	17,750	.9	16,658	394,295	21.30
Buckwheat	1,443	12	17,644	17,644	12.00
Horses and Mules*			17,633	329,415	
Cattle*			*14,920	704,224	
Sheep*			*16,638	194,663	

AVERY COUNTY

In Northwest Mountain; population, 10,335; area, 152,320 acres; topography, mountains, Stone, Blue Ridge; waters, North Toe, Linville rivers; railroads, Linville, I. E. Tenn. and W. N. C.; buslines, Eastern Tennessee Gaultney, Gilliam; highways, Nos. 69, 175, 176, 181, 194, 691; telephones; incorporated cities and towns, ‡Newlands, Spruce Pine, Banner Elk.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	9	123	\$91,811	\$110,583	\$330,529	\$219,946
Forest Products	5	99	75,345	73,813	264,320	190,507
Miscellaneous Industries	4	24	16,466	36,770	66,209	29,439

Lumbering is principal industry.

Forest Products.—The forest area is approximately 105,141 acres, comprising 69 per cent of the total land area. More than 42 per cent of the forest area is farm woodland; including some 10,416 acres of woodland pasture. The principal merchantable species are chestnut 50 per cent, oaks 25 per cent and hemlock 15 per cent.

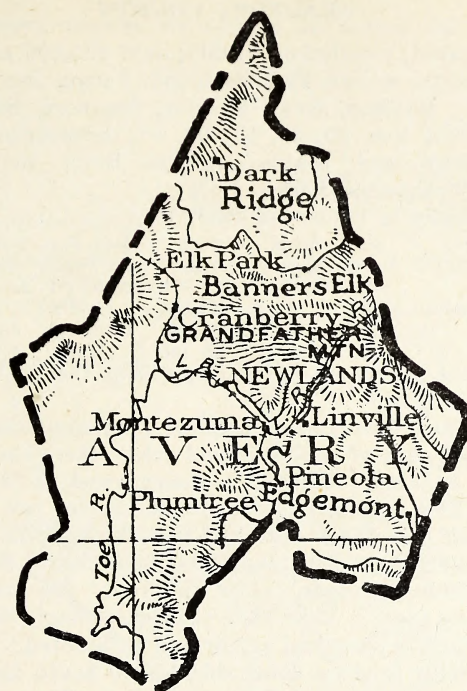
The estimated present total stand of 145,000,000 board feet of saw timber is fairly accessible by roads.

The Boone area of the Pisgah National Forest occupies the eastern border and a large private forest, well protected, covers the headwaters of Linville river and the South Slope of Grandfathers mountain. The heavy stands of hemlock and white pine, formerly abundant, have practically all been cut.

Some 21 sawmills produce about 14,000,000 board feet of lumber per annum. A considerable quantity of cord wood, ties and telephone poles are also produced. The estimated stumpage value of the timber cut annually is around \$110,000.

Mineral Products.—The minerals produced in this county are asbestos, feldspar, mica, and iron ore. The largest deposit of amphibole asbestos in the State occurs along the North Toe river four miles from Minneapolis. A large deposit of magnetic iron ore occurs near Cranberry. The iron content in ores of the county is 68 per cent at times. Five miles south of Cranberry there is a belt of titaniferous magnetite. For about two miles to the north and west of Plumtree, along the North Toe river, mica prospects have been found. In this same belt feldspar occurs and on the north side of the river a very large deposit has just been opened up. The total value of the mineral production in this county for 1926 was \$48,785.

Water Resources and Power.—Waters: North Toe and Linville rivers; Elk, Lost Cove, Cragg Prong, Plumtree, and other creeks. Water: Large and small surface streams offer many sources of supply; chemical and physical characteristics, excellent and typical of mountain waters. Power: Hydro-electric installations of 250 h. p. on Elk creek owned by Elk Park; and 100 h. p. on North Toe river owned by Newlands. A trans-



mission line from Newlands serves Linville but distribution of power over the county is not yet general. Rough estimates give a total of 5,000 undeveloped horsepower.

Agricultural Products.—This county's agricultural lands have been increased considerably during the past few years, due to better communications with the counties of the south and to a large extent to agricultural extension work. Fruits thrive here. The peculiarly favorable conditions in this high area for certified seed Irish potatoes have proven to be equal to those of Maine and Canada. Considerable buckwheat is grown here but the principal crop is corn. Oats are the most important of the small grains, while hay occupy two-thirds of the cultivated area. The tax lists shows 2,200 hogs, of which over 300 are sows; and 2,740 sheep ewes.

County Products	14,917 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn (grain)	4,522	22	99,484	\$109,432	\$24.20
Oats	2,051	20	41,020	29,124	14.20
Rye	1,046	15	15,690	19,142	18.30
Buckwheat	1,001	15	14,661	14,661	15.00
Hay (Including Meadow)	9,050	.7	6,665	165,492	17.38
Horses and Mules*			1,213	114,299	
Cattle*			3,800	179,360	
Sheep*			3,907	45,712	

BEAUFORT COUNTY

In Central Coastal; population, 31,000; area 537,600 acres; topography, low, fertile, swamps; waters, Pamlico sound, Pungo, Tar rivers; railroads, A. C. L., N. S.; buslines, Swan Quarter, Seashore, Southerland Bros., Mitchell; highways, Nos. 30, 33, 91, 92, 97; telegraphs and telephones; incorporated cities and towns, Aurora, Bath, Belhaven, Pantego, *Washington, Washington Park.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	32	1,174	\$848,570	\$2,220,491	\$4,106,008	\$1,885,517
Food and Kindred Products	8	72	58,568	119,789	307,647	187,858
Forest Products	15	961	685,808	1,329,207	2,326,510	997,303
*Miscellaneous	9	141	104,194	771,495	1,471,851	700,356

*Includes, Fertilizer, Foundry and Machine Shop products, Clay and Stone products, Cotton Seed Oil, etc.

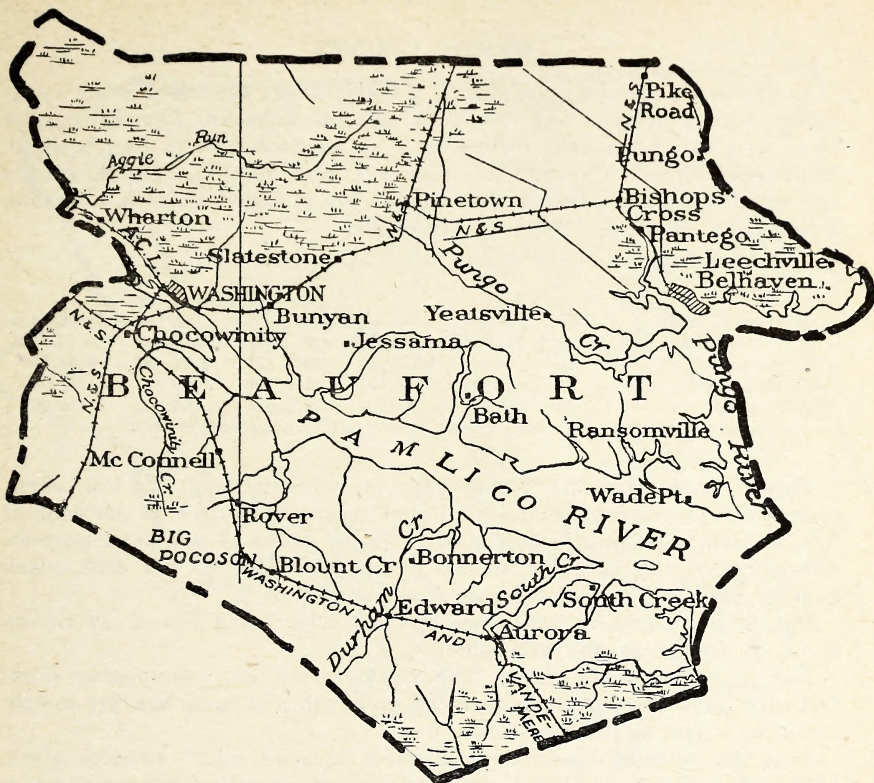
Forest Products.—The forest area is approximately 445,062 acres, comprising 82 per cent of the total land area. More than 21 per cent of the forest area is farm woodland; including some 11,551 acres of woodland pasture. The principal merchantable species are loblolly pine 70 per cent, longleaf pine 5 per cent, and gum 20 per cent.

The estimated present total stand 180,000,000 board feet of saw timber is mostly accessible by roads, water and rail. The scene of a lumber industry for many years. Fires have been exceedingly destructive. With proper management a perpetual supply can be secured.

Some 10 sawmills produce about 40,000,000 board feet of lumber per annum. Some sawn staves and ties are also cut. The estimated stumpage value of the timber cut annually is around \$200,000.

Water Products.—This county is a shipping center, dealing in commercial fish from its own waters as well as fish from the waters of Pamlico sound not within the county. The large quantity of oysters handled here come from Hyde county and in the adjacent waters. The fish and shellfish handled in the county in 1927 were oysters, 85,788 bushels; crab meat, 6,305 gallons; foodfish, 2,659,302 lbs., valued at \$170,526. The principal classes of fish were trout, sea mullet, blue fish, mullets, croakers, spots, mackerel, shads, herring, perch, bass, rock, flounders, and others.

Water Resources and Power.—Waters: Pamlico (Tar) and Pungo rivers; Pamlico sound; Goose, Upper Spring, Campbell, South, Durham, Blount, Chocowinity, Bear, Tranters, Broad, Upper Goose, Bath, Bond, Pantego, and other creeks; artesian and shallow wells. Water: Surface: abundant in distribution and quantity; typical of extreme eastern waters in case of local bodies; chemical quality, dependent on locality, very good in some instances in western part of county above points reached by tidal waters of Pamlico sound; physical quality, variable. Largest town, Washington, uses filtered water from Tranters creek very successfully. Underground: chemical quality, variable, but fair in some instances, though generally hard and high in chlorides. Power: Transmission lines radiating from Washington Municipal Steam Plant of 2,550 h. p. Lines are owned largely by towns at end of lines, service is available from them. Most of the lines operated at voltage of 13,200 and the lines and service could be classified as "rural power." Service is reliable and reasonable.



(Size of map slightly reduced)

Agricultural Products.—In this county are a variety of agricultural interests, containing, as it does, both the richest and the poorest soil in the State. On both sides of the Pamlico river are drainage districts containing black lands which, in fertility and organic content, are probably equal to any in the world. Around Aurora and Pantego are important trucking centers. The county shipped in 1927, 1,257 cars of potatoes, making this the second most important potato county in the State. It also shipped 127 cars of sweet potatoes and many cars of other vegetables. The corn crop is an important one, this being one of the few counties in North Carolina exporting this product. Tobacco and cotton are also large crops. About 12 per cent of the land is in cultivation, leaving large tracts of cut-over, timber and swamp lands yet untouched by the plow. One of the State's experimental farms is located at Wenona, in the drainage district.

County Products	74,954 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	34,562	28	967,736	\$ 822,576	\$ 23.80
Tobacco	11,718	666	7,804,188	1,794,963	153.00
Cotton	10,396	256	5,568	505,661	48.64
Irish Potatoes	4,987	118	588,466	865,045	173.00
Hay (Including Meadow)	7,069	.9	6,094	134,068	19.80
Horses and Mules*			5,494	594,586	
Cattle*			2,660	125,552	
Hogs*			20,811	243,489	

BERTIE COUNTY

In Northern Coastal; population, 24,600; area, 449,920 acres; topography, fertile uplands and lowlands; waters, Roanoke, Chowan, Cashie rivers; sounds, Albemarle; railroads, A. C. L., Seaboard, C. So.; buslines, McPherson, Transit Corporation; highways, Nos. 30, 305, 342; telegraphs and telephones; incorporated cities and towns, Aulander, Kelford, Lewiston, Powellsville, Roxobel, Windsor, Woodville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	14	394	\$233,245	\$381,171	\$784,482	\$403,311
Forest Products	9	342	189,399	142,117	389,457	247,340
*Miscellaneous	5	52	43,846	239,054	395,025	155,971

*Includes, Peanut processing, Clay products, Cotton Seed products, etc.

Forest Products.—The forest area is approximately 351,123 acres, comprising 78 per cent of the total land area. More than 38 per cent of this is farm woodland including some 12,185 acres of woodland pasture. The principal merchantable species are loblolly pine 70 per cent, black gum 10 per cent, and sweet gum 5 per cent.

The estimated present total stand of 700,000,000 board feet of saw timber is not at present readily accessible.

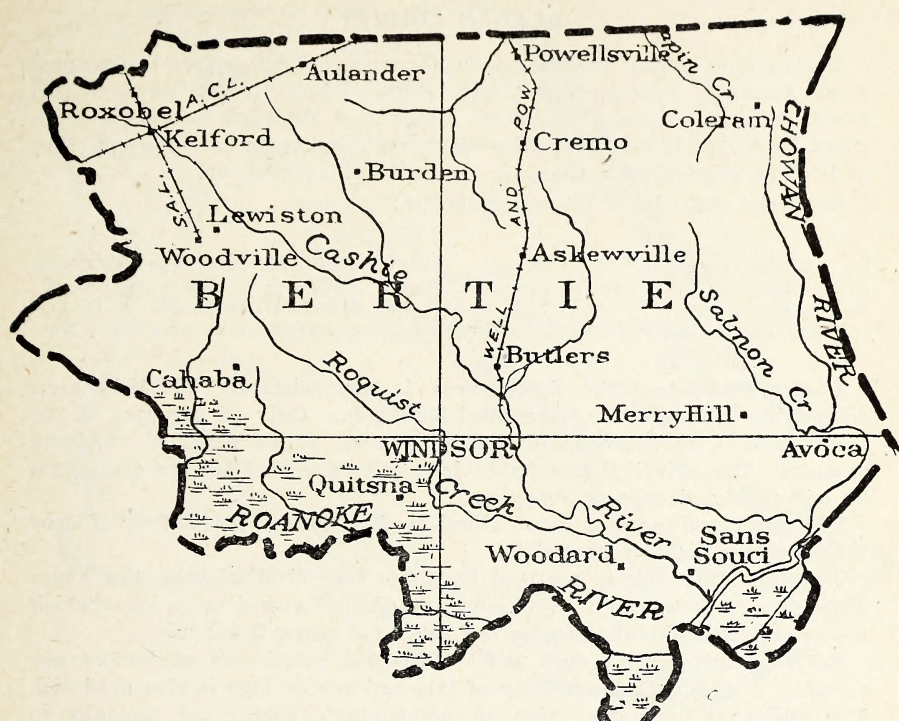
The pine lands have mostly been cut over but are reproducing satisfactorily. The swamp lands, growing gum, ash and some oak are mostly owned by a few large companies.

Some 24 sawmills most of them small "ground mills" produce about 15,000,000 board feet of lumber per annum. Some piling, veneer and saw logs are also cut. The estimated stumpage value of the timber cut annually is around \$100,000.

Water Products.—This county is located adjacent to Albemarle sound, which is a body of fresh water, consequently the water products are fresh water fish, except the spring run of Shad, etc. The catch of food fish in 1927 was 439,807 pounds valued at \$27,840.

Water Resources and Power.—Waters: Chowan, Roanoke, and Cashie rivers; Salmon, Chinkapin, Connaritser, Roquist, and other creeks; Albemarle sound; shallow and deep well underground supplies. Water: Surface supplies abundant but little use is made of them. They are classed as typical eastern waters, satisfactory for general use only after filtration. Underground supplies that are satisfactory can be obtained in practically all parts of the county from either shallow or deep wells. Power: Small municipal steam plant provides for local demands of Windsor, and the northwest section of the county is served from two transmission lines of the Virginia Electric. Extensions to present transmission system can be readily made as needed. There are a number of water-power grist mills.

Agricultural Products.—Since the long bridges across the Roanoke and Chowan rivers to Williamston and Edenton have been built this county is now the most important area tributary to the State, the acreage being



appreciably more even than that devoted to corn, which is the recognized basic crop in all counties of the State. A considerable portion of the hay production comes from the peanut vines left by the picking machines. About 23 per cent of the land is in cultivation, two-thirds of which is worked by tenants. The peanut producing areas account for the 3,308 sows and for the 22,439 hogs sold or slaughtered last year.

County Products	98,350 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	28,315	23	651,245	\$ 586,120	\$ 20.70
Cotton	18,482	275	10,633	986,015	53.35
Tobacco	7,563	741	5,604,183	1,232,920	103.00
Peanuts	37,961	930	35,341,691	1,767,085	46.55
Hay (Including Meadow)	11,448	.4	5,117	107,457	8.40
Horses and Mules*			5,637	622,835	
Cattle*			1,994	94,117	
Hogs*			18,858	220,639	

BLADEN COUNTY

In Sandhill-Coastal; population, 20,900; area, 624,640, acres; topography, level, swampy; waters, Cape Fear, South, Black rivers; lakes, White, Black, Baker; railroads, Seaboard, Virginia & Carolina Southern; highways, Nos. 21, 23, 201, 211; telegraphs and telephones; incorporated cities and towns, Bladensboro, Clarkton, Council, †Elizabethtown.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	21	1,128	\$631,633	\$1,687,943	\$2,858,560	\$1,170,617

Lumber leading industry in this county, though the largest single establishment is a Cotton Mill.

Forest Products.—The forest area is approximately 507,488 acres, comprising 81 per cent of the total land area. Only 21 per cent of the forest area is farm woodland; including some 12,355 acres of woodland pasture. The principal merchantable species are pine 67 per cent, gum 23 per cent, and cypress 5 per cent.

The estimated present total stand is 230,000,000 board feet of saw timber which is fairly accessible.

The half of the county north of the Cape Fear river contains the larger proportion of forest land. Here are situated also several large lakes which are owned and administered by the State for recreational use.

Some 45 sawmills produce about 25,000,000 board feet of lumber per annum. A considerable quantity of ties and veneer logs is also produced. The estimated stumpage value of merchantable timber cut annually is around \$90,000.

Water Resources and Power.—Waters: Cape Fear, South, and Black rivers; Lake, Colly, Turnbull, Harrisons, Crawley, and other creeks; Bakers, Little Singleterry, Salters, Jones, White, Black, and Singleterry lakes; Sugg's Mill, Melvin's Mills, Long's Mill, Smith's, Hester's, Council Mill, Bryant's, and other, but smaller, ponds; shallow and deep well underground supplies. Water: Sources of surface supply, extremely numerous; characteristics, typical of coastal plain waters but little specific data concerning them is available. Underground waters from either shallow or deep wells are available to the entire county. Meagre information in hand indicates that they are variable in quality, but for the most part, are satisfactory for use. Power: Transmission lines of the Carolina Power and the Tidewater Power Co., are interconnected near Bladensboro. The line of the former company serves the southeast section of the county, while the latter company has a line extending across the county by way of Elizabethtown to Garland in Sampson county. Although these lines do not make power immediately available over the entire county, the system is capable of extension when the need justifies.

Agricultural Products.—This is a large county, its soil is primarily of a sandy nature. The western portion is the principal farming area while the northeastern section is made up almost entirely of cut-over, uncultivated sandhills. About 10 per cent of the land area is in cultivation and while



(Size of map slightly reduced)

some tobacco is grown here, it is generally recognized as a cotton county. Almost two-thirds of the farming is done under ownership operation and the farms are well connected by State highway system. It has two or three picturesque natural lakes in its sand hill section.

County Products	62,086 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	30,820	21	647,220	\$634,276	\$ 20.58
Cotton	17,558	206	7,557	723,390	41.20
Tobacco	3,463	770	2,666,510	506,637	146.00
Cow Peas	1,722	10	17,220	25,141	14.60
Hay (Including Meadow)	3,502	.6	2,262	56,550	15.00
Horses and Mules*			3,221	369,219	
Cattle*			3,502	165,294	
Hogs*			11,543	135,053	

BRUNSWICK COUNTY

In South Coastal; population, 15,200; area, 505,600 acres; topography lowland and swamps; waters, Cape Fear, Waccamaw, Shallotte rivers; railroads, A. C. L., Seaboard, W. S. S.; buslines, Queen City; highways, Nos. 20, 30, 130; telegraphs and telephones; incorporated cities and towns, ‡Southport.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	13	235	\$190,520	\$856,370	\$1,227,102	\$470,732

Fertilizer is chief industry with numerous-saw mills.

Forest Products.—The forest area is approximately 414,660 acres, comprising 82 per cent of the total land area. Only 12 per cent of the forest area is farm woodland; including some 4,600 acres of woodland pasture. The principal merchantable species are pine 75 per cent, gum 13 per cent, oak 5 per cent, and cypress 5 per cent.

The estimated present total stand of 220,000,000 board feet of saw timber is fairly accessible.

The naval store industry, once of first importance, has recently experienced a revival, the second growth longleaf pine on certain areas having become large enough to bleed.

Some 40 sawmills produce about 20,000,000 board feet of lumber per annum. A considerable quantity of veneer logs and some poles are also produced each year. The estimated stumpage value of the timber cut annually is around \$60,000.

Water Products.—This is the most southerly county in the state and one of the most active in the commercial fisheries industry. In 1927 its shellfish production was: Clams 1,356 bushels. The shrimp production was 364,076 pounds, and the menhaden catch was 56,000,000 fish. Food fish amounted to 103,149 pounds, valued at \$4,544.

Water Resources and Power.—Waters: Cape Fear, Waccamaw, and Shallotte rivers; Orton, Brunswick, Town, Hood, Cawcaw, and other creeks; Atlantic ocean; shallow and deep underground water supplies. Water: Surface supplies in western part of county are typical of eastern waters and are but little used as sources. In the extreme east, surface supplies are mostly in the tidal range and are not satisfactory for industrial or domestic use. General use is made of well waters which, obtainable over the entire county, are fairly satisfactory. Power: Northeast corner of county is crossed by a 33,000 volt transmission line of the Tide-water Power Co. Extensions to the system can be made as needed.

Agricultural Products.—Cotton growing has been diminishing in this county and in its place food and feed crops are being grown to better advantage. Some trucking is done here as evidence by the 27 solid cars shipped last season. This is an important sweet potato county. Peanuts



are grown for cows maintained by the landowner farmers, who predominate. A very small proportion of the land is in cultivation in the east central portion, where cut-over and swamp land predominates.

County Products	24,432 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	11,721	19	222,699	\$222,699	\$19.00
Peanuts	4,356	1180	5,140,080	257,004	59.00
Sweet Potatoes	2,005	117	234,585	175,939	88.00
Tobacco	1,023	763	780,549	136,915	134.00
Hay (Including Meadow)	2,126	.5	1,114	24,508	11.00
Horses and Mules*			1,674	187,718	
Cattle*			1,657	78,210	
Hogs*			8,711	101,919	

BUNCOMBE COUNTY

In Central Mountain; population, 73,800; area, 422,000 acres; topography, hilly with Blue Ridge, New Found mountains; waters, French Broad, Swannanoa, Ivy rivers; railroads, Southern; buslines, B. & H. Independent, A. & B. Carter; highways, Nos. 10, 20, 63, 69; telegraphs and telephones; incorporated cities and towns, †*Asheville, Alexander, Biltmore, Biltmore Forest, Black Mountain, Kenilworth, So. Biltmore, Weaverville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	89	3,494	\$3,779,256	\$10,271,003	\$19,283,135	\$9,012,132
Food and Kindred Products	31	263	309,423	2,466,499	3,968,678	1,502,179
Forest Products	12	879	894,222	2,329,178	3,984,607	1,655,429
Printing and Publishing	12	152	283,540	261,137	1,343,181	1,082,044
Textiles and their products	6	1,140	999,229	2,372,158	4,916,674	2,544,516
*Miscellaneous	28	1,060	1,292,842	2,842,031	5,069,995	2,227,964

*Includes, Railroad repair shops, Concrete products, Foundry and Machine Shop products, etc.

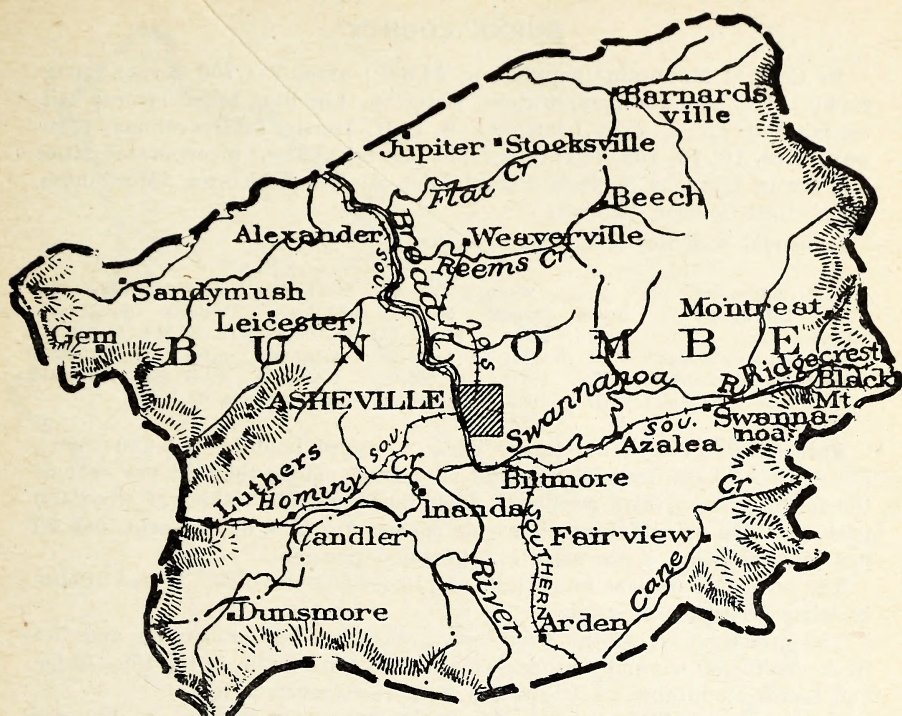
Forestry.—This county has a forest area of approximately 250,125 acres, comprising 61 per cent of the total land area. More than 30 per cent of the forest area is farm woodlands; which includes some 54,000 acres of woodland pasture. Of the forest land outside of farms only 32 per cent is held in large timber tracts. The merchantable species are chestnuts 35 per cent, oak 12 per cent, yellow pine 8 per cent, poplar 10 per cent. It is estimated that there still remains a total stand of 165,000,000 board feet of saw timber which is fairly accessible by roads and rail.

The most important large timber tracts are a portion of the Pisgah National Forest and the Asheville Municipal watershed, these two together comprise nearly 60,000 acres of publicly owned forest land. Should this timber be exploited it will in all probability be cut conservatively so that a desirable future stand may be secured.

Some 10 sawmills are operating in the county producing about 3,000,000 board feet of lumber per annum. In addition to the lumber a considerable quantity of pulpwood is produced each year. The estimated stumpage value of the total timber cut annually is around \$70,000.

Mineral Products.—Corundum occurs near Democrat and Swannanoa Gap associated with peridotite dikes. A small lense of limestone occurs between Cane creek and Arden similar to that mined at Fletcher. Near Black Mountain "massive" kyanite occurs in a lense four feet wide which can be traced for almost a mile. A deposit of chromite is found on Big Ivy creek, 16 miles northwest of Asheville. On the road between Leicester and Weaverville serpentine occurs abundantly at several localities, many of the deposits being suitable for development. Gneissic granite occurs at many localities in the county, notably near Asheville, Riverside Park, on Beaverdam creek, and along the French Broad.

Water Resources and Power.—Waters: French Broad, Swannanoa, and Ivy rivers; Cane, Hominy, Reems, Flat, Sandy Mush, and numerous other creeks; in addition to numerous municipal private lakes and ponds. Water: The county abounds in swift running mountain streams that are ample to furnish large needs for water. The quality is of such excellence that chemical treatment is only rarely deemed necessary for the most exacting industrial process and not at all for domestic use. Power: Adequate electric power is available to practically all sections from Carolina Power



and Light Co., transmission lines which radiate in several directions from Asheville. This Company, besides having a 3,350 h. p. hydro-electric plant at Weaver and a 17,500 h. p. steam plant at Elk Mountain, transmits power into the county from other company owned hydro plants and inter-connections with other companies. Estimates indicate that there is approximately 95,000 undeveloped horsepower on the French Broad River.

Agricultural Products.—This county is one of the most progressive agricultural counties in the mountain section, its progressiveness lies in the line of dairying, trucking and fruit growing, more than in field crops. Twenty-seven solid cars of tomatoes were shipped in 1927. Buncombe has more dairy cattle than any other county and also good pastures and hay crops. The cultivated area is about one-sixth of the total; corn occupying 45 per cent and hays 27 per cent. This county has more hogs sold and slaughtered than any other mountain county and in hens it ranks high, with over 100,000. It reported 68 tractors, 23 radios and 62 silos on farms in 1925.

County Products	59,352 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	26,005	26	676,130	\$615,278	\$23.66
Wheat	7,562	11	83,182	111,464	14.74
Oats	5,157	17	87,669	63,122	12.24
Rye	3,152	13	40,976	57,776	18.33
Hay (Including Meadow)	6,927	.9	6,538	160,181	22.05
Horses and Mules*			4,091	416,909	
Cattle*			15,569	734,857	
Hogs*			5,485	64,175	
Fruit					
			170,938 Apple trees	164,426 Bu. U. S. Census	
			86,827 Peaches N. C. Census 1927		

BURKE COUNTY

In Central Mountain; population, 24,600; area, 341,760 acres; topography, high, mountainous; waters, Catawba, Linville, Johns rivers; railroads, Southern, C. & W.; buslines, B. & H. Lenoir, Intercarolinas; highways, Nos. 10, 18, 105, 181; telegraphs and telephones; incorporated cities and towns, Connelly Springs, Drexel, Glen Alpine, Hildebran, †Morganton, Rutherford College, Valdese.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	31	3,431	\$1,901,371	\$8,603,297	\$12,935,268	\$4,331,971
Textiles and their Products	14	1,754	1,015,284	4,183,044	5,887,403	1,704,359
*Miscellaneous Industries	17	1,677	886,087	4,420,253	7,047,865	2,627,612

*Includes, Furniture, Leather, Printing and Publishing, Sawmill products, etc.

Forest Products.—The forest area is approximately 266,030 acres, comprising 70 per cent of the total land area. More than 34 per cent of the forest area is farm woodland; including some 7,558 acres of woodland pasture. The principal merchantable species are pine 65 per cent, oak 20 per cent, chestnut 5 per cent, and poplar 7 per cent.

The estimated present total stand of 110,000,000 board feet of saw timber is fairly accessible by roads.

The greater part of the best timber is owned by lumbermen and lies in the northwestern and southeastern parts of the county, in the Blue Ridge and South mountains. Little virgin timber, however, is left.

Some 18 sawmills produce about 4,500,000 board feet of lumber per annum. A considerable quantity of cordwood for pulp is also produced. The estimated stumpage value of the timber cut annually is around \$20,000.

Mineral Products.—Near Brindletown and Warlicks Mills, asbestos is found. The South Mountains district was at one time an important gold producing section of the State. Brick clays occur near Morganton and in river flats in the northeast section of the county. Mineral production for 1926 was \$8,000.

Water Resources and Power.—Water: Catawba, Linville, Johns rivers; Jacob, Silver, Warrior, Lower, and numerous smaller creeks; Bridgewater and smaller artificial lakes. Water: Surface water supplies, typical of the mountains, are available. Their exceptional suitability for industrial and domestic use is proven both by past usage and chemical analysis. Underground waters available to some extent but scarcely utilized. Power: Duke Power installations of 35,600 and 48,000 h. p. are found at Bridge-water and Rhodhiss, respectively, both plants being on the Catawba river. The Rhodhiss development is partly in Caldwell county. Double 100,000-volt transmission lines cross the county running eastward from Bridge-water, and service is available in the east from a lower voltage line.

Agricultural Products.—This county's soils are good, requiring little fertilizer but they respond quickly to soil improvement methods. While rolling among the foot-hills, its eastern area is typically Piedmont in type.



About one-seventh of its area is in cultivation. Wheat makes up about 25 per cent of the crop land and generally produces well. About 1,700 acres of cotton were planted in 1927, averaging almost a half bale to the acre. For 1924 there were reported 84,500 apple trees and 139,000 bushels of apples and over 73,000 peach trees. There were 70 tractors reported as being used in 1927.

County Products	46,379 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	21,054	24	505,296	\$409,290	\$19.44
Wheat	11,632	9	104,688	155,985	13.41
Cow Peas	1,312	12	15,744	23,301	17.76
Rye	2,662	11	29,282	41,580	15.62
Hay (Including Meadow)	4,363	.9	4,136	84,788	18.45
Horses and Mules*			2,457	262,975	
Cattle*			3,633	171,478	
Hogs*			2,999	35,088	
Cotton	1,697	237	841	80,840	47.64

CABARRUS COUNTY

In Central Piedmont; population, 38,700; area, 249,600 acres; topography, flat, slate hills; waters, Rocky rivers; railroads, Southern, N. S.; buslines, Southern, Concord-Albemarle; highways, Nos. 15, 27, 74, 80, 151; telegraphs and telephones; incorporated cities and towns, *Concord, Mt. Pleasant.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added By Manuf.
All Industries	34	9,467	\$6,546,798	\$17,231,666	\$30,358,962	\$13,127,296

Textile products is the leading industry, this county being the home of the World's largest producers of towels.

Forest Products.—The forest area is approximately 113,927 acres comprising 45 per cent of the total land area. More than 49 per cent of this is farm woodland including 14,146 acres of woodland pasture. The principal merchantable species are pine (chiefly shortleaf) 75 per cent, oak 20 per cent.

The estimated present total stand of 45,000,000 board feet of saw timber is fairly accessible.

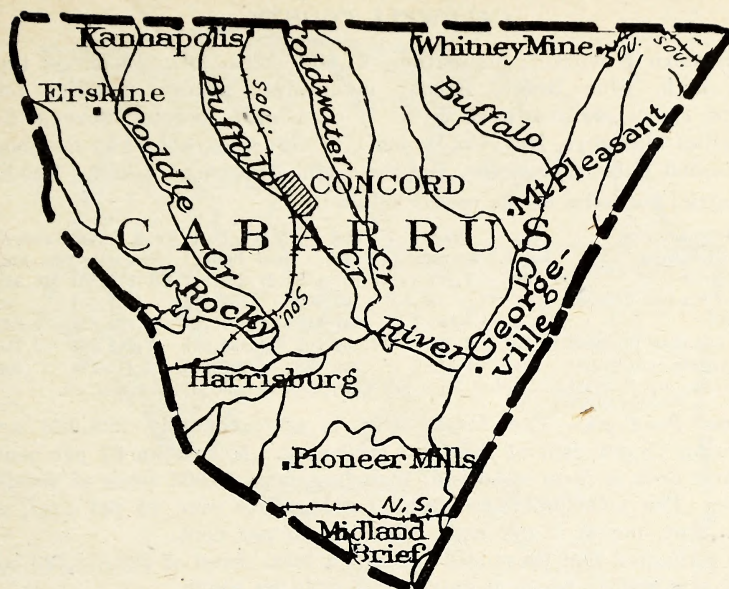
The remaining timber is mostly in the eastern part. Two-thirds of the area is the remnant of the original forest and contains more or less oak. Second growth contains an increasing proportion of pine.

Some 15 sawmills produce about three million board feet of lumber per annum. Some 13,000 oak ties are also cut. The estimated stumpage value of the timber cut annually does not exceed \$16,000.

Mineral Products.—Gold has been found at a great number of points in this county; the largest nugget, 28 lbs., was discovered in the old Reed mine which is among the most important. Copper, lead, and zinc ores have been found in some of the old gold mines. Large areas of granite are found over many parts of the county principally in the western half, the most promising being near Fore's Mill, Stewarts place west and southwest of Concord. Augite syenite occurs in a belt three miles wide within one and one-half miles of Concord. Along Stokes Ferry road a fine grained, light gray, granite occurs. Six miles east of Concord a fine grained deep pink granite is found. Near Concord a clay suitable for brick has been found. Production of minerals in the county for 1926 was \$23,100.

Water Resources and Power.—Waters: Rocky river, Dutch, Buffalo, Cold Water, Coddle, Irish Buffalo, Little Buffalo, Little Bear, Muddy, Adams, and other creeks. Water: Sources of supply are numerous in point of number of large streams. Larger towns possess excellent municipal supplies. Prevailing turbidities of larger streams may necessitate filtration of supplies, but other physical and chemical qualities are excellent. Water widely used by many textile and other industrial plants with complete success.

Agricultural Products.—While cotton occupies the largest acreage of any crop in this county, the grains and hay are prominent, making this a fairly well diversified area. The western and northern portions are



particularly important in the intensiveness and type of their farming activities. About 50 per cent of the land area is under cultivation. It is a typical Piedmont county in most senses of the word. We find here the usual number of sows, hens, vegetables, etc. The fact that 339 tractors were active in 1927, points to this feature of its progress. With 6,212 milch cows reported in 1927, the dairying interest is important and the western portion has many silos.

County Products	81,058 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	29,784	217	13,521	\$1,279,699	\$42.97
Corn	24,134	22	530,948	477,853	19.80
Wheat	12,021	11	132,321	189,090	15.73
Oats	5,695	23	130,985	86,450	15.18
Hay (Including Meadow)	8,079	1.1	8,707	207,488	26.21
Horses and Mules*			4,964	530,940	
Cattle*			6,212	293,206	
Hogs*			4,863	56,897	

CALDWELL COUNTY

In Eastern Mountain; population, 57,500; area, 301,440 acres; topography, high, Blue Ridge, Brushy mountains; waters, Yadkin, Johns, Catawba rivers; railroads, C. & N. W.; buslines, Lenoir, Blowing Rock, Statesville; highways, Nos. 17, 18, 90, 171, 175; telegraphs and telephones; incorporated cities and towns, Granite Falls, Hudson, ‡*Lenoir, Rhodhiss.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manfu.
All Industries	66	3,469	\$2,257,628	\$7,922,817	\$13,311,301	\$5,388,484
Food and Kindred Products	5	15	23,202	258,674	329,351	70,677
Furniture	9	1,061	847,986	2,191,281	4,221,638	2,030,357
Textiles and their Products	18	2,077	1,139,702	4,534,351	7,253,598	2,719,247
*Miscellaneous Industries	34	316	246,738	938,511	1,506,714	568,203

*Printing and Publishing, Leather, Stone and Clay products, Saw Mill products, etc.

Forest Products.—The forest area is approximately 228,928 acres, comprising 75 per cent of the total land area. More than 51 per cent of the forest area is farm woodland; including some 16,392 acres of woodland pasture. The principal merchantable species are pine 45 per cent, oaks 25 per cent, poplar 8 per cent, chestnut 15 per cent.

It is estimated that there still remains a total stand of 226,638,720 board feet of saw timber which is fairly accessible by roads.

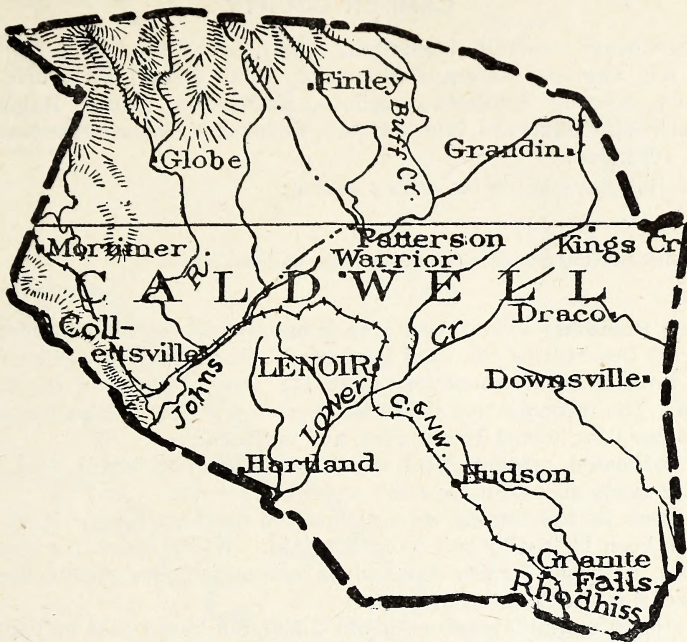
The barren area of the Pisgah National Forest extends into the western part. Most of the old growth timber is in the hands of lumbermen. The lookout tower recently erected by the State on Hibritan mountain will materially help in forest fire prevention.

Some 17 sawmills are operating in the county producing about 4,500,000 board feet of lumber per annum. Some veneer logs, ties and pulpwood are also cut. The estimated stumpage value of the timber cut annually is around \$20,000.

Mineral Products.—Near the old Baker mine some asbestos occurs. Just west of Lenoir manganese ore has been found but not prospected to any great extent. At several places in the county granite gneiss occurs but is not accessible due to lack of transportation facilities.

Water Resources and Power.—Waters: Catawba, Johns, Yadkin, Upper Little (headwaters) and Middle Little (headwaters) rivers; Wilson, Mulberry, Mill, Buffalo, Lower Gunpowder, Cedar, and other creeks; Rhodhiss and Oxford Shoals lakes. Water: Generously abundant in point of sources of both large and small supply available; chemical and physical qualities, both excellent except for intermittent turbidities occurring in the larger streams following heavy rains. Power: Hydro-electric plants of Duke Power Co., are as follows: 48,000 h. p. at Rhodhiss on Catawba river (development partly in Burke County); 625 h. p. on Gunpowder creek (2), and an additional plant on Buffalo creek of 200 h. p. privately owned. Undeveloped waterpower is roughly estimated at 10,000 h. p. A transmission line from Rhodhiss serves Lenoir and vicinity with power. Power service can be extended as needed.

Agricultural Products.—This is a well diversified county. In its south-eastern area there were over 600 acres of cotton grown in 1927. The Yadkin river first becomes important in this county, watering some



beautiful farms in its valley. Good fruit is grown here, with some fine orchards on the mountainsides. Corn occupies 45 per cent of the cultivated area, while wheat claims 16 per cent. Its good grazing lands are available for further utilization. Fifty-two farm tractors are owned in the county.

County Products	44,717 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn (for grain)	20,067	25	501,675	\$481,608	\$24.00
Wheat	10,140	10	101,400	156,156	15.40
Oats	1,739	21	36,519	28,485	16.38
Rye	2,468	8	19,744	25,470	10.32
Hay (Including Meadow)	4,791	.9	4,138	93,105	20.25
Horses and Mules*			2,323	242,869	
Cattle*			4,877	230,194	
Hogs*			3,698	43,267	
Cotton	625	236	309	9,2500	47.20

CAMDEN COUNTY

In Northeast Coastal; population, 5,382; area, 140,800 acres; topography, flat, swamps; waters, Pasquotank, North rivers; Albemarle sound; railroads, Norfolk Southern; buslines, McPherson, Lucas, Habit Bros., Elizabeth City; highways, Nos. 34, 341; telephones; incorporated cities and towns, ‡Camden.

Industrial statistics of the county follow:

No. Manufacturing establishments reported from Camden County.

Forest Products.—The forest area is approximately 105,980 acres, comprising 75 per cent of the total land area. More than 19 per cent of the forest area is farm woodland; including some 789 acres of woodland pasture. The principal merchantable species are loblolly pine 50 per cent, gum 40 per cent, mixed 10 per cent, and white cedar.

The estimated present total stand of 30,000,000 board feet of saw timber is fairly accessible by roads and water.

The great Dismal Swamp extends into the northern part. Much of this area has been logged by rail from Virginia. White cedar, the most valuable tree, has been largely cut and on account of fire second growth of this species is far from satisfactory.

Some eight sawmills produce about 2,500,000 board feet of lumber per annum. Veneer logs, and some saw logs for manufacture outside the county are also cut. The estimated stumpage value of the timber cut annually is around \$12,500.

Water Resources and Power.—Waters: Pasquotank and North rivers; Dismal Swamp; some poorly defined creeks; Albemarle sound; Shallow well underground supplies. Water: Surface supplies abundant and excellent for many purposes, but generally unsatisfactory for industrial or domestic use; underground supplies mostly taken from shallow wells which yield fairly satisfactory water. Power: Nearest available power is at Elizabeth City, just across boundary line in Pasquotank County, where service is from transmission system of Virginia Electric. Service lines can be extended into county from that point on demand.

Agricultural Products.—This county is an instance of North Carolina's self-supporting farming counties. While this is largely due to the absence of concentrated population yet the county ranks high in its natural soil fertility and its production of corn, soy beans and truck crops, especially potatoes. The great Dismal Swamp occupies the northern portion, which throws the intensively cultivated area into the southern portion. Railroad shipments in 1927 from this county, were 562 carloads of Irish potatoes, 69 of sweet potatoes, 16 of cabbage, 5 of English peas and 3 of string beans, besides those shipped by trucks, etc. Twenty-five percent of the cultivated area was planted to soy beans in 1927.

County Products	36,750 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	16,271	24	390,504	\$292,878	\$18.00
Soy Beans	8,957	15	134,355	161,226	18.00
Cotton	5,648	275	3,249	295,108	52.25
Irish Potatoes	2,455	112	274,960	371,196	151.00
Hay (Including Meadow)	1,430	1.0	1,395	30,690	22.00
Horses and Mules*			1,845	195,075	
Cattle*			1,560	73,632	
Hogs*			6,376	74,599	



CARTERET COUNTY

In Southeast Coastal; population, 16,500; area 366,720 acres; topography, low, swamps; waters, Neuse, Newport, North rivers; Pamlico, Bogue, Core sounds; Atlantic ocean; railroads, N. So.; buslines, New Bern Atlantic, Cartaret Transit; highways, Nos. 10, 101; telephones and telegraphs; incorporated cities and towns, * \ddagger Beaufort, *Morehead City, Newport.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	21	188	\$168,451	\$375,008	\$995,446	\$620,438
Food and Kindred Products	5	31	21,970	52,813	148,430	95,617
Fertilizer	9	90	79,762	227,061	582,299	355,238
*Miscellaneous Industries	7	67	66,719	95,134	264,717	169,583

*Includes Printing and Publishing, Lumber, Foundry products, etc.

Forest Products.—The forest area is approximately 345,253 acres, comprising 94 per cent of the total land area. About 9 per cent of the forest area is farm woodland, this includes some 2,855 acres of woodland pastures. The principal merchantable species are loblolly pine, 80 per cent, and longleaf pine, 10 per cent.

The estimated present total stand of 85,000,000 board feet of saw timber is fairly accessible by roads and water.

Some 30 per cent of the forest area is swamps containing chiefly gum and oak timber. The rest is pine forest nearly all of which has been cut over. Some encouraging stands of long-leaf pine occur. The "Open Grounds," a large area without tree growth is classed as forest land.

Only about four sawmills are operating in the county producing about 4,000,000 board feet of lumber per annum. A considerable quantity of cooperage material is also produced. The estimated stumpage value of the timber cut annually is around \$20,000.

Mineral Products.—Sand which has been used by the railroad occurs at a number of places in the county. The production in 1926 was \$1,316.

Water Products.—Carteret county is the most active county in the state in the fishing industry. Other counties lead Carteret in some particular catch of commercial water products but Carteret leads in other catches, and in the total value of the water products. In the year 1927, the products were as follows: Clams, 17,870 bushels; soft crabs, 79,554 dozens; crab meat, 3,248 gallons; escallops, 119,535 gallons; oysters 73,-228 bushels; shrimps, 64,980 pounds. Number of menhaden were 108,-412,000. Food fish taken were, 8,111,584 pounds, valued at \$371,496.

In coöperation with U. S. Bureau of Fisheries the Division of Commercial Fisheries is very active in this county in encouraging and promoting the industry.

Water Resources and Power.—Waters: Newport, North, and Neuse rivers; Hunters and Pettifold creeks; Bogue, Core and Pamlico sounds; Onslow and Raleigh bays; Atlantic ocean; shallow and deep well underground supplies. Water: Surface sources are extremely plentiful, but are not generally suitable for industrial or domestic use; shallow and medium



(Map reduced to two-thirds size)

depth wells in general use. The chemical and physical qualities of the well supplies vary greatly, but fairly satisfactory supplies are usually obtainable, and in some instances, excellent ones.

Agricultural Products.—With only 6 per cent of its area in cultivation, Carteret County specializes in early commercial truck and in 1927, it shipped 228 cars of Irish potatoes; 509 of sweet potatoes, (in the latter, ranking first in the state), 152 of cabbage and a large number of other vegetables. The Gulf stream gives this district its wonderfully temperate climate. One drainage district has developed very fertile soil and there are others merely requiring drainage to be made into valuable agricultural areas.

County Products	18,108 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	6,798	21	142,758	\$139,903	\$ 20.58
Tobacco	1,959	672	1,312,416	262,483	134.00
Peanuts	1,739	1,150	1,999,850	89,993	51.75
Sweet Potatoes	1,951	90	175,590	103,598	53.00
Hay (Including Meadow)	2,492	.7	1,794	35,880	14.00
Horses and Mules*			1,516	156,212	
Cattle*			1,156	54,563	
Hogs*			4,443	51,983	

CASWELL COUNTY

In North Piedmont; population, 16,400; area 257,280 acres; topography, fertile, rolling; waters, Dan river; railroads, Southern; bus-lines, Hillsboro-Chapel Hill; highways, No. 14, 62, 65, 70, 144; telegraphs and telephones; incorporated cities and towns, Milton, †Yanceyville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manfu.
All Industries	2	9	\$8,890	\$5,340	\$25,784	\$20,444

Forest Products.—The forest area is approximately 130,616 acres, comprising 50 per cent of the total land area. More than 75 per cent of the forest area is farm woodland; including some 11,134 acres of woodland pasture. The principal merchantable species are shortleaf pine, (including some spruce pine) 75 per cent, and oak 15 per cent.

The estimated present total stand of 60,000,000 board feet of saw timber is fairly accessible by roads only.

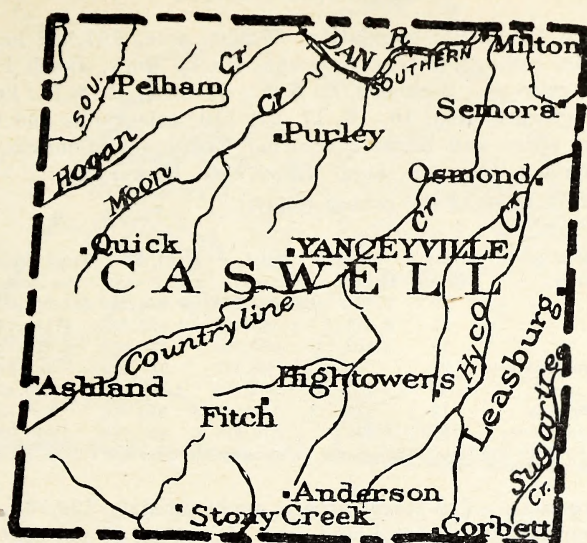
The original growth was hardwoods and pine, the "forest pine" or original growth shortleaf occurring with oak, poplar, hickory, gum, and cedar. In the southern portion two-thirds of the forest area is original growth, while in the northern part two-thirds is old field pine type.

Some 40 sawmills produce about 25,000,000 board feet of lumber per annum. A considerable quantity of ties are also cut. The estimated stumpage value of the timber cut annually is around \$125,000.

Mineral Products.—Near Pelham, a large deposit of gneissic granite and the only operating quarry of the county is located. On the Yanceyville-Oxford road a very large deposit of well-banded gneiss occurs.

Water Resources and Power.—Waters: Dan river (short stretch); Countryline, Rattlesnake, Moon, Hogans, Hyco, and other creeks. Water: Sources of both large and small supply, numerous; chemical and physical characteristics, considered excellent and in same class as mountain waters from low elevations. Power: High voltage transmission line of Carolina Power crosses northeast corner of county.

Agricultural Products.—About 33 per cent of the cultivated acreage is devoted to tobacco which is sold outside of the State at the nearest market, Danville, Va. About 1,500 tenants work over one-half of the cultivated acreage; and while its natural soil conditions are good, the long practice of tenantry has left it rather infertile. One hundred and seventeen tractors were used last year and, as with most tobacco counties, there was a large quantity of commercial fertilizers, over 8,000 tons, used last year.



County Products	50,935 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	17,548	23	403,604	\$ 379,388	\$ 21.62
Tobacco	16,263	660	10,733,580	2,683,395	165.00
Wheat	7,201	12	86,412	111,471	15.48
Oats	1,023	18	18,414	10,680	10.44
Hay (Including Meadow)	3,042	.8	2,283	50,226	18.00
Horses and Mules*			3,197	244,859	
Cattle*			3,051	144,007	
Hogs*			4,867	56,944	

CATAWBA COUNTY

In Western Piedmont; population, 37,800; area, 261,120 acres; topography, fertile, rolling; waters, Catawba, Henry Fork, Jacob Fork, South Fork rivers; railroads, Southern, C. & N.; buslines, B. & H., Lenoir-Blowing Rock; highways, Nos. 10, 16, 17, 67, 110; telegraphs and telephones; incorporated cities and towns, Catawba, Claremont, Conover, *Hickory, Highland, Maiden, ‡Newton, Long View, West Hickory.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	89	5,437	\$3,594,219	\$9,623,251	\$17,040,001	\$7,416,750
Cotton Goods	21	2,649	1,465,469	4,424,817	7,144,930	2,720,113
Knit Goods	10	1,115	685,740	1,878,633	3,375,725	1,497,092
Food and Kindred Products	17	70	69,532	547,305	885,342	338,037
Furniture	11	1,221	1,032,822	1,986,078	4,035,123	2,049,045
Other Forest Products	12	174	121,141	358,670	655,782	297,112
*Miscellaneous Industries	18	208	219,515	427,748	943,099	515,351

*Includes, Foundry Products, Printing and Publishing, Fertilizer and Cotton Seed Products, etc.

Forest Products.—The forest area is approximately 122,961 acres, comprising 47 per cent of the total land area. More than 65 per cent of the forest area is farm woodland; including some 10,402 acres of woodland pasture. The principal merchantable species are second growth pine (short-leaf and spruce pine) 60 per cent, oak 25 per cent.

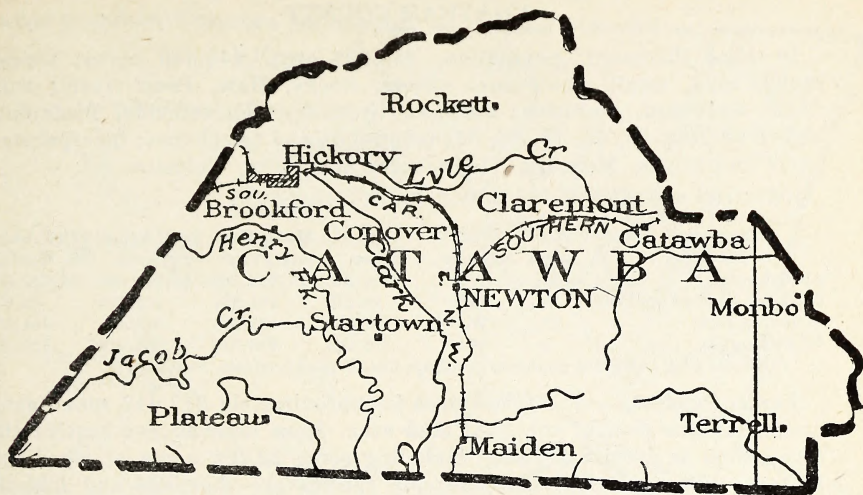
The estimated present stand of 50,000,000 board feet of saw timber is fairly accessible.

About one half the forest area is the original hardwood and pine type, very much culled. The remainder is second growth pine on abandoned farm land at all stages of growth, and in varying conditions of cutting.

Some 15 sawmills produce about 5,000,000 board feet of lumber per annum. A considerable quantity of ties are also produced. The estimated stumpage value of the timber cut annually is around \$25,000.

Mineral Products.—From Anderson's mountain, in a southwest direction to the Lincoln county line, there is a belt of slate which contains a low percentage of manganese. There is a lense of dolomitic limestone which extends from Maiden, northwestward to the Catawba river, and three quarries have been opened along this belt in the past. Sand and gravel are found along the rivers. To the southeast of Hickory, pottery clays occur. Mineral production in the county for 1926 was \$5,400.

Water Resources and Power.—Waters: Catawba, Henry Fork, Jacob Fork, and South Fork rivers; Pott, Clark, Maiden, Mountain, Ball, Lyle, and other creeks; Oxford Shoals, Lookout Shoals, and other smaller lakes. Water: The supply is numerous in point of sources. The chemical and physical qualities are excellent, but the prevailing turbidities are slightly higher than are found westward. Power: Hydro-electric developments of 56,000 h.p. at Oxford Shoals and 33,000 h.p. at Lookout Shoals deliver their output to the transmission system of Duke Power. The two developments are partly in Alexander and Iredell counties respectively. Two large capacity transmission circuits extend westward across the county



from Lookout Shoals by way of Hickory, and a third line extends southward from Hickory to Newton, thence, parallel to the Southern and North-western Railroad, across the southern part of the county. Awaiting development, it is estimated that there are 45,000 horsepower on the Catawba River in that section bordering on Iredell County.

Agricultural Products.—This county has long been noted for its industries. For many years it has been an important producer and shipper of field vegetables. More recently it gained renown as a dairying area. It has a naturally productive soil, if given fair treatment. Wheat and cotton are both quite important. Hay and pasturage are naturally expected, along with its livestock activity. A large proportion of the total land area is cultivated. There is a close balance between the cotton, wheat, corn, and "other crop" acreage. 1,155 acres were reported last year as being in field truck, while 1,073 acres additionally were reported as home gardens. It had over 100,000 hens, 5,058 milch cows and over 5,000 hogs were sold and slaughtered during 1927. Important in nursery products.

County Products	88,156 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	23,357	21	490,497	\$436,542	\$18.69
Wheat	20,618	10	206,180	294,837	14.30
Cotton	19,373	234	9,484	893,057	46.10
Cow Peas	2,574	12	30,888	48,803	18.96
Hay (Including Meadow)	8,605	.9	7,860	184,710	21.15
Horses and Mules*			3,197	487,146	
Cattle*			3,051	144,007	
Hogs*			4,867	56,944	

CHATHAM COUNTY

In East Piedmont; population, 24,600; area, 445,440 acres; topography, hilly, small mountains; waters, Rocky, Haw, Deep rivers; railroads, Seaboard, Southern; buslines, Greensboro-Fayetteville, Piedmont; highways, Nos. 50, 60, 75, 90, 93; telegraphs and telephones; incorporated cities and towns, Moncure, *Pittsboro, Siler City, Goldston.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manfu.
All Industries	34	834	\$493,965	\$1,564,783	\$2,595,089	\$1,030,306
Food and Kindred products	5	10	10,579	154,954	193,005	38,051
Forest Products	20	353	204,525	421,311	835,466	414,155
*Miscellaneous	9	471	278,861	988,518	1,566,618	578,100

*Includes Clay and Stone products, Fertilizer, Cotton Seed products, Textiles, etc.

Forest Products.—The forest area is approximately 317,012 acres, comprising 71 per cent of the total land area. More than 60 per cent of the forest area is farm woodland; including some 22,291 acres of woodland pasture. The principal merchantable species are shortleaf and loblolly pine 65 per cent, oak 30 per cent.

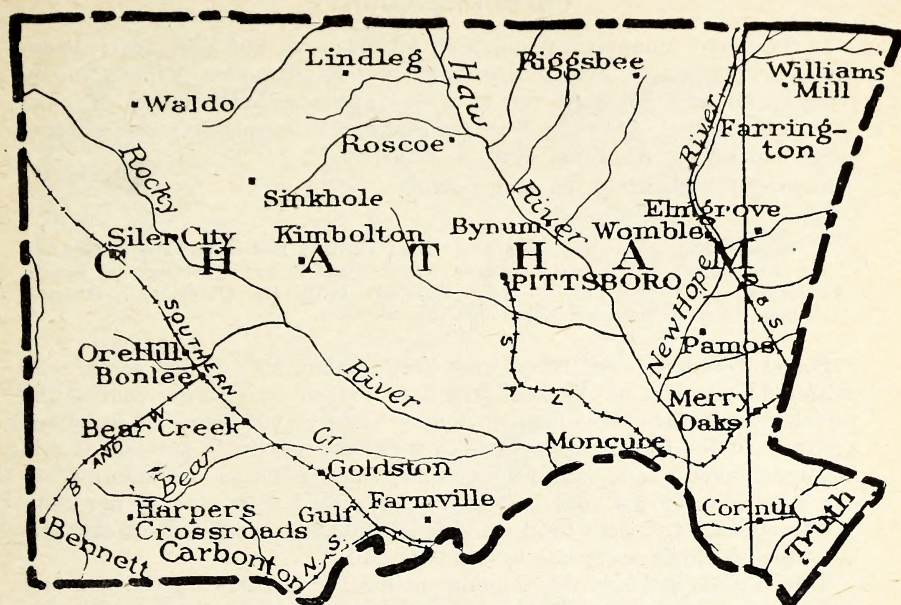
The estimated present total stand of 65,000,000 board feet of saw timber is fairly accessible by roads and rail.

Some 50 per cent of the forest is the original hardwoods or hardwoods and pine and nearly half of this is the black jack and post oak type. Second growth pine on abandoned farm land comprises the remainder. Longleaf pine occurs in the extreme eastern part.

Some 50 sawmills produce about 10,000,000 board feet of lumber per annum. Some 75,000 ties are also cut. The estimated stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—A good deposit of bituminous coal occurs in the southeastern part of the county, it being estimated that there is about 67,000,000 tons of recoverable coal in the Deep river field. Some low grade copper and gold ores have been worked near Pittsboro. Manganiferous iron ore occurs in the Buck Horn iron mines, the per cent of manganese being low. An abundance of brick and tile clays and shales are found in the southeastern part of the county and sandstone and diabase suitable for building purposes also occur along the Deep river. Total value of the mineral production in the county for 1926 was \$289,490.

Water Resources and Power.—Waters: Haw, Rocky, and Deep rivers; Beaver, Whiteoak, New Hope, Bear, and other creeks. Water: Streams of large size are numerous and the quality of their water is excellent from the standpoint of potability and industrial use. Power: Hydro-electric plants of the Carolina Power are found on the Deep river at Lockville and Carbondon, each of 1,350 h. p. capacity; these being jointly shared with Lee county, property of the same company. There are steam plants of 40,000 and 1,800 h.p. capacity on the Cape Fear and Deep rivers, respectively. The output of these plants is delivered to the transmission system of the company, which has extended lines to serve the greater part of the county. Those sections not served are within easy reach of service. Estimates are that undeveloped water power remains in amount, 10,000



h.p. on the Haw River near its mouth, with 5,000 h. p. in the river above Bynum, and 2,500 h. p. on the Deep river. The Deep river power is shared jointly with Lee County.

Agricultural Products.—This is the central county of the state, located near the eastern border of the Piedmont Plateau area. Being primarily of a stiff Cecil clay soil, small grains and grasses do well. An appreciable proportion of the land is given to cotton and tobacco, with the latter crop considerably in the minority. Chatham has long been known for its abundance of rabbits. About 22 per cent of its area is in cultivation; cotton, corn and wheat utilizing three-fourths of this. Agriculture is active here with 3,359 colonies of bees. Last year they reported 1,683 sows and over 9,000 hogs sold and slaughtered. The number of sheep ewes is also unusually large for this territory.

County Products	88,156		Yield Per Acre	Production or *Number	Value	
	Acreage				Total	Per Acre
Corn	37,490	21	787,290	\$700,688	\$18.69	
Wheat	17,199	11	189,189	272,432	15.84	
Cotton	15,073	231	7,284	692,891	45.97	
Oats	5,392	19	102,448	72,738	13.49	
Hay (Including Meadow)	3,777	.9	3,561	78,342	19.80	
Horses and Mules*			5,975	650,865		
Cattle*			6,246	294,811		
Hogs*			7,718	90,301		

CHEROKEE COUNTY

In Southeast Mountain; population, 16,000; area 290,560 acres; topography, fertile valleys, Smoky mountains; waters, Hiwassee, Valley, Nottely rivers; railroads, Southern and L. & N.; buslines, Independent, Car. Ga. Tenn.; highways, Nos. 10, 28; telegraphs and telephones; incorporated cities and towns, Andrews, Marble, Murphy.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	10	526	\$303,986	\$1,004,479	\$1,769,946	\$765,467

Lumber, Tanning Extract and Leather are leading industries.

Forest Products.—The forest area is approximately 204,895 acres, comprising 71 per cent of the total land area. More than 62 per cent of the forest area is farm woodland, including some 22,000 acres of woodland pasture. Of the forest land outside of farms practically 75 per cent is held in large timber tracts. The principal merchantile species are chestnut 15 per cent, oaks 60 per cent, poplar 15 per cent, yellow pine 10 per cent,

The estimated present total stand is 260,000,000 board feet of saw timber which is fairly accessible by roads or rail.

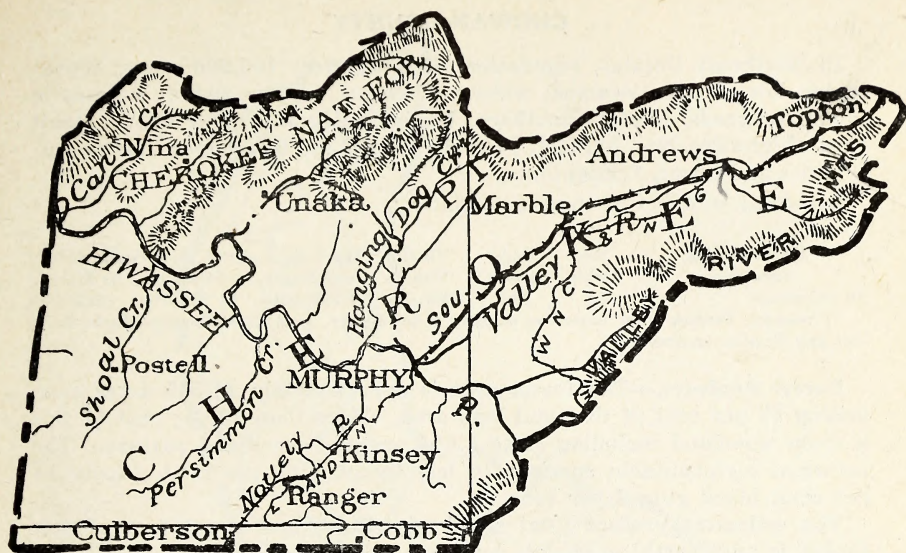
This county includes the shipping points for Graham on the one side and Clay on the other. Two large railroad systems connect at Murphy, and State Highway No. 10 crosses the county.

Two large and 20 small sawmills produce about 9,500,000 board feet of lumber per annum. A considerable quantity of pulpwood, ties, tanbark and extract wood are also produced. The estimated stumpage value of the timber cut annually is around \$70,000.

Mineral Products.—The minerals produced commercially in this country are marble, limestone, brown iron ore, and talc. The State's most extensive marble and limestone deposits occur along the Nottely and Valley Rivers. Their composition varies from high calcium to high magnesium and the color from white to blue. The marble is suitable for tombstone, building and crushed stone. Brown iron ores occur in several localities between Murphy and Andrews. A recent report shows several million tons in reserve, averaging from 45% to 60% iron. Talc. occurs in lenses at several places between Marble and Kinsey. About 2½ miles above the mouth of Low Creek a very pure manganese ore (pyrolusite) occurs averaging 58.36% manganese.

The total value of the mineral production in the County for 1926 was \$85,750.

Water Resources and Power.—Waters: Hiwassee, Valley, and Nottely rivers; Hanging Dog, Cane, Shoal, Persimmon, and other creeks. Water: Abundant with regard to number, distribution, and size of mountain streams. Chemical and physical quality and potability are excellent. Power: Electric power for Murphy is furnished from a 500 h.p. development of the Nottely river owned by Carolina-Tennessee Power Co. Undeveloped water power is estimated to exist on the Hiwassee river in amounts, 55,000 h.p. at Appalachia, 76,300 h.p. at Coleman, and 22,800



h.p. at Murphy. Electricity is not yet generally available to the county. Andrews has 1,500 h.p. available from municipal hydro plant on Hiwassee river in Clay county, 15 miles distant.

Agricultural Products.—This is the extreme western county of the state. The principal farming is done in the river valley. Corn and hay makes up two-thirds of its cultivated land area. Rye is also quite important. Its rugged topography necessitates grazing in order to utilize the hillsides. 52,000 hens, 3,100 hogs sold and slaughtered last year, 69,000 apple trees of bearing age, 41,000 peach trees, and 3,000 colonies of bees, were reported. About one-tenth of its area is in cultivation.

County Products	32,085 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	20,601	22	453,222	\$385,239	\$18.70
Rye	4,089	9	36,801	45,633	11.16
Wheat	767	9	6,903	9,595	12.51
Hay (Including Meadow)	4,599	1.5	6,783	144,139	31.88
Apples	79,197		90,846	148,987	
Horses and Mules*			2,088	228,376	
Cattle*			4,578	216,082	
Hogs*			3,340	39,078	

CHOWAN COUNTY

In Northeast Coastal; population, 10,679; area, 105,600 acres; topography, low, fertile, swamps; waters, Chowan, Yeopim rivers; Albemarle sound; railroads, Norfolk Southern; buslines, Edgerton, McPherson, Habit Bros.; highways, Nos. 32, 321, 342; telegraphs and telephones; incorporated cities and towns, *Edenton.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	15	653	\$360,646	\$3,283,199	\$4,205,519	\$922,320

Processing Peanuts most important industry in the county, some Cotton Seed products, Fertilizer and Textiles produced.

Forest Products.—The forest area is approximately 71,555 acres comprising 67 per cent of the total land area. More than 30 per cent of this is farm woodland including some 2,634 acres of woodland pasture. The principal merchantable species are loblolly pine 60 per cent, tupelo 15 per cent, black gum 6 per cent.

The estimated present total stand of 140,000,000 board feet of saw timber is only partly accessible by roads, water and rail.

The swamp lands lie along Chowan river and Bear swamp on each side of the pine land. A number of small stands of merchantable timber are being held by the owners. The balance of the forest land has been cut over and is reproducing. Some have good stands of gum that are as yet inaccessible.

Some seven sawmills produce about 10,000,000 board feet of lumber per annum. A considerable quantity of veneer logs, piling and mine props are also cut.

The estimated stumpage value of the timber cut annually is around \$40,000.

Water Products.—Chowan county produces only two food fish in quantity, shad and herring, with a total of 712,500 pounds, valued at \$19,250.

Water Resources and Power.—Waters: Chowan and Yeopim rivers; Bullard, Rocky, Lock, Pollock Swamp, Pembroke, Queen Anne, and other creeks; Burnett Mill, and Welch Mill ponds; Albemarle sound; shallow and medium depth underground supplies. Water: Surface supplies abundant in quantity and sources of availability, but of little value for industrial or domestic use except in a few instances; underground supplies, generally available over county from shallow wells of fair chemical and physical quality, and in most places in greater quantity from deep wells, but the water on the whole is less desirable. Power: Transmission line of Virginia Electric from Winfall in Perquimans county crosses southeast corner of county to serve Edenton.

Agricultural Products.—To visualize large peanut fields one should visit this section where the peanut acreage is greater than that of any other crop. With peanuts, we find the usual large number of hogs produced and sold, as well as hay saved. A large proportion of the land is in cultivation, with large amount of fertilizer used. The new bridge across the Chowan river to Bertie County, has opened this area to a much



greater traffic and importance to the state at large. Tobacco is gaining a rapid foothold here. Most of the soil is of the fine, sandy loam type that permits of trucking and almost all types of farming. In 1927 it shipped 45 cars of English peas and 72 cars of other garden truck.

County Products	35,785 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Peanuts	12,269	900	11,042,100	\$552,105	\$45.00
Corn	11,119	28	311,323	295,756	26.60
Cotton	7,964	235	3,915	374,308	47.00
Tobacco	792	708	560,736	128,969	163.00
Sweet Potatoes	878	102	89,556	60,898	69.00
Hay (Including Meadow)	7,748	.6	4,998	99,960	12.00
Horses and Mules*			2,091	231,837	
Cattle*			982	46,350	
Hogs*			11,244	131,555	

CLAY COUNTY

In Southwest Mountain; population, 5,100; area 140,800 acres; topography, hilly, valleys, Konetah mountains; waters, Hiwassee river; railroads, Southern; buslines, T. W. Angle; highways, Nos. 28, 287; incorporated cities and towns, ‡Hayesville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	4	26	\$11,750	\$7,605	\$36,010	\$28,510
Saw mills reporting.						

Forest Products.—The forest area is approximately 113,567 acres, comprising 81 per cent of the total land area. Some 30 per cent of the forest area is farm woodland; including some 4,000 acres of woodland pasture. Of the forest land outside of farms 75 per cent is held in large timber tracts. The principal merchantable species are chestnut 30 per cent, oaks 40 per cent, poplar 5 per cent.

The estimated present total stand of 170,000,000 board feet of saw timber is fairly accessible by roads or rail.

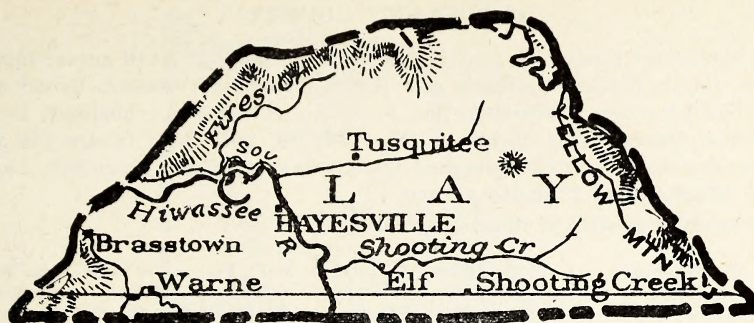
The large tracts are for the most part owned by lumber companies and tanning extract interests. A logging railroad connects with the Southern railroad at Andrews.

Five sawmills produce about 7,500,000 board feet of lumber per annum. Most of the saw logs cut in the county are shipped into Cherokee county for manufacture into lumber. Much pulpwood and tanning extract wood is also taken out. The estimated stumpage value of the timber cut annually is around \$130,000.

Mineral Products.—In the Buck Creek section low grade (3 to 4%) copper ore occurs. Corundum occurs one mile south of Elf. A large garnet deposit is found near Chunky Gal mountain. About eight miles from Hayesville a belt of manganiferous slates occur; the percentage of manganese is low. A marble deposit occurs along Peachtree creek near Brasstown. Kaolin clay has been mined from a deposit which is located on the highway between Hayesville and Elf.

Water Resources and Power.—Waters: Hiwassee river; Shooting, Fines, Brasstown, and other creeks. Water: Headwater streams numerous but small. Chemical and physical quality and potability are exceptionally good. Power: Andrews, in adjoining county to Clay, has 1,500 h. p. development on the Hiwassee River. Undeveloped waterpower is estimated to be available on the Hiwassee river in amounts 10,700 h. p. at Sweetwater, and 12,000 h.p. at Tusquitee.

Agricultural Products.—In this county there are no so-called "cash crops," but most of the farms are self-supporting. Fruits and vegetables do well, as do small grains and grasses. This county reported 4,289 hogs sold and slaughtered during 1927 and more than 26,000 hens owned. It used only 500 tons of commercial fertilizers and shows seven tractors being used in the county. Good roads have done much to develop this county as it has no railways.



County Products	17,603 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	8,932	21	187,572	\$166,939	\$18.69
Wheat	3,514	9	31,626	46,174	13.14
Rye	976	7	6,832	9,223	9.45
Hay (Including Meadow)	1,890	.9	1,611	32,542	18.18
Horses and Mules*			1,087	119,817	
Cattle*			2,702	127,534	
Hogs*			2,969	34,737	

CLEVELAND COUNTY

In Southwest Piedmont; population, 37,500; area, 317,440 acres; topography, fertile plains, Southern and Kings mountains; waters, Broad and First Broad rivers; railroads, So., S. A. L., C. C. & O.; buslines, Inter-carolinas, Queen City; highways, Nos. 18, 20, 205, 206; telegraphs and telephones; incorporated cities and towns, Grover, Kings Mountain, Lattimore, Mooresboro, ‡*Shelby, Waco.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	52	4,234	\$3,052,108	\$9,474,044	\$15,366,573	\$5,892,529
Food and Kindred Products	8	55	49,487	742,120	935,840	193,720
Textiles and their Products	25	4,021	2,882,829	7,953,039	13,345,097	5,392,058
*Miscellaneous Industries	19	158	119,792	778,885	1,085,636	306,751

*Includes Cotton Seed products, Printing and Publishing, Fertilizer, Foundry and Machine Shops, etc.

Forest Products.—The forest area is approximately 138,487 acres, comprising 43 per cent of the total land area. More than 59 per cent of the forest area is farm woodland; including some 27,808 acres of woodland pasture. The principal merchantable species are pine 80 per cent, oak 10 per cent, poplar, hickory and chestnut 10 per cent.

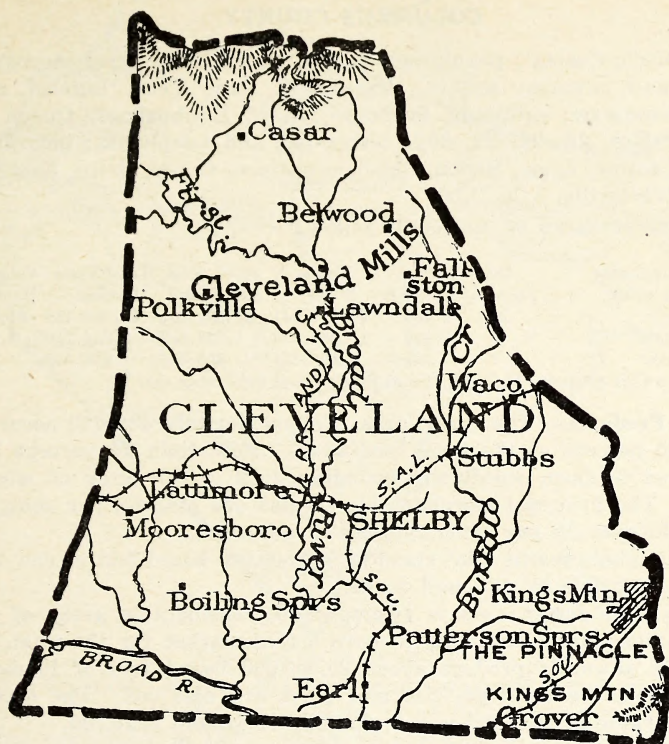
The estimated present total stand 80,000,000 board feet of saw timber is fairly accessible by roads and rail.

The remaining supply of old growth timber lies chiefly in the northern and northwestern parts. The proportion of second growth pine has increased with the decline in stand of the original forest of hardwood and pine.

Some 12 sawmills produce about 3,000,000 board feet of lumber per annum. Little else besides firewood is cut. The estimated stumpage value of the timber cut annually will not exceed \$15,000.

Mineral Products.—Emeralds have been found along the First Broad river southwest of Shelby. Near Kings Mountain, a 1,000 foot seam of low grade manganese slate occurs. A linear group of narrow bands of crystalline, high magnesium and limestone extends across the eastern part of the county, east of Kings Mountain where a few quarries have been opened. Tin ore has been found in the vicinity of Kings Mountain and on the southern end of Chestnut Ridge. Mica has been mined to the northwest of Shelby and a very good grade of kaolin clay is found there. Along the streams in the eastern part of the county brick clays occur. Value of the mineral production in the county for 1926 was \$4,800.

Water Resources and Power.—Waters: First Broad and Broad rivers; Knob, Maple, Buffalo, Whiteoak, Pott's, King's, Hickory, Ward, Crooked Run, Harris, Brushy, Sandy Run, and other creeks. Water: Large streams are numerous as indicated under "Waters." In addition to undeveloped sources of supply, reasonably adequate municipal supplies are found in all towns of any size. The chemical and physical qualities of these waters make them excellent for industrial and domestic use. Power: Ample power is made available from transmission of Duke Power. Distribution system in the county radiates in several directions from Shelby to supply power to practically all sections. Rural sections of the county are especially



well served with low voltage lines. "Rural power" is an accomplished fact in this county. Rough estimates place the undeveloped water power at 10,000 horsepower.

Agricultural Products.—In plain view of the Blue Ridge mountains this is a county that has advanced amazingly in the past few years. It is the most important cotton county in the Piedmont belt, with over half of its cultivated area devoted to this crop. With the exception of Scotland and Hoke counties, Cleveland has a larger percentage of cotton land, in proportion to the crop land area, than any county in the State. It also boasts a considerable interest in wheat and livestock production. While the soil varies in its natural fertility, a large tonnage of commercial fertilizers is used, which goes primarily under cotton. It ginned 48,639 bales of cotton last year, which amount was exceeded only by one other county in the State.

County Products	123,802	Yield	Production	Value	Value
	Acreage	Per Acre	or *Number	Total	Per Acre
Cotton	65,376	283	38,706	\$3,626,276	\$55.47
Corn	38,182	181	801,822	777,767	20.38
Wheat	9,457	11	104,027	151,879	16.06
Oats	4,748	19	90,212	68,561	14.44
Hay (Including Meadow)	3,246	1.0	3,138	78,450	25.00
Horses and Mules*			5,048	692,960	
Cattle*			7,143	337,150	
Hogs*			6,104	71,417	

COLUMBUS COUNTY

In Southern Coastal; population, 31,500; area 597,120 acres; topography, uplands and swamps; waters, Waccamaw, Cape Fear, Lumber rivers; lakes, Waccamaw; railroads, Seaboard, A. C. L.; buslines, Queen City; highways, Nos. 20, 21, 23, 202; telegraphs and telephones; incorporated cities and towns, Acme, Ballon, Chadbourn, Cerro Gordo, Delco, Fair Bluffs, Tabor, ‡Whiteville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added By Manuf.
All Industries	25	1,735	\$1,113,641	\$1,829,315	\$3,598,173	\$1,768,858
Forest Products	18	1,545	983,020	1,223,669	2,614,716	1,391,047
*Miscellaneous	7	190	130,621	605,646	983,457	377,811

*Includes Clay products, Fertilizer, Tools, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 489,667 acres, comprising 80 percent of the total land area. More than 24 percent of the forest area is farm woodland; including some 9,800 acres of woodland pasture. The principal merchantable species are pine 52 per cent, black and tupelo gum 20 per cent, cypress 15 per cent.

The estimated present total stand of 520,000,000 board feet of saw timber is fairly accessible by rail and roads.

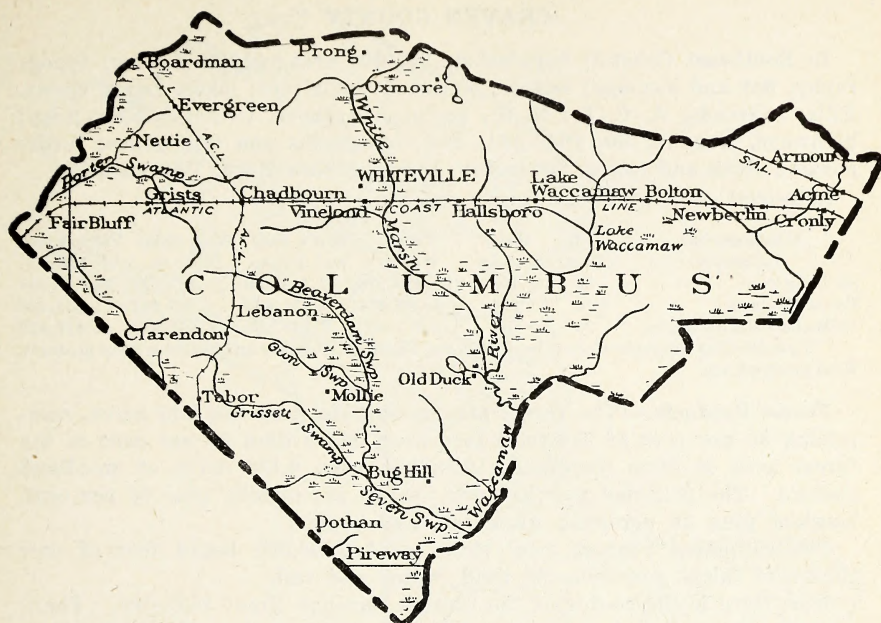
Much of the forest area is swamp land, considerable areas of which have remained uncut awaiting a more active market for the gum.

Some 50 sawmills produce about 65,000,000 board feet of lumber per annum. Some veneer logs, ties and poles are also cut. The estimated stumpage value of the timber cut annually is around \$225,000.

Mineral Products.—In the vicinity of Boston, Whiteville, Chadbourn, and Fair Bluff, occur beds 12 feet thick of sandy marl which contains from 30 per cent to 60 per cent calcium carbonate. Near Acme a marl plant operated for many years, the marl showed from 65 per cent to 95 per cent calcium carbonate. Fire clays have been reported from near Newberlin and Delco. Brick clays occur at Clay Brick. Mineral production in the county for 1926 was \$50,027.

Water Resources and Power.—Waters: Cape Fear, Waccamaw, and Lumber rivers; Seven Creeks, White Marsh, Porter swamp, Beverdam swamp, and other creeks; Waccamaw lake; shallow well and artesian underground waters. Water: Surface, typical of southeastern part of state, but little specific data is available. Underground, more generally used than surface supplies; flowing wells are obtained in many sections and water is near surface everywhere; chemical and physical quality, considered good generally and excellent in some instances. Power: Available in county from 33,000-volt line of Tidewater running from Wilmington to Whiteville; and lower voltage lines radiating in several directions from Whiteville. Above company has 300 h. p. steam plant at Whiteville.

Agricultural Products.—While practically no cotton is now grown in this county yet it is more prosperous than before, with tobacco, truck and feed crops predominating. Chadbourn is an important strawberry



(Map reduced to two-thirds size)

point. The county shipped 815 cars of strawberries, 78 of cucumbers, 48 of sweet potatoes, 45 of Irish potatoes, 17 of string beans and several cars of other vegetables in 1927. About 12 per cent of the total land area is in cultivation. In 1927 15,000 hogs were sold while 51,000 hens were reported on the farms. It contains a large natural lake used as a resort center in the western section.

County Products	64,312 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	31,335	22	689,370	\$668,689	\$21.34
Tobacco	12,436	822	10,322,392	2,044,478	164.00
Cotton	5,598	235	2,752	259,159	46.29
Cow Peas	1,656	11	18,216	30,603	18.48
Hay (Including Meadow)	6,442	.7	4,821	114,113	16.57
Horses and Mules*			4,972	574,924	
Cattle*			3,105	146,556	
Hogs*			19,562	228,875	

CRAVEN COUNTY

In Southeast Coastal; population, 31,400; area, 422,400 acres; topography, flat and swamps; waters, Neuse, Trent rivers; lakes, Long, Great, Ellis; railroads, A. C. L.; N. S.; busline, Seashore, Oriental, New Bern; highways, Nos. 10, 30, 101, 301, 302; telegraphs and telephones; incorporated cities and towns, Bridgeton, Dover, †New Bern, Vanceboro.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab*	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	39	2,168	\$1,499,976	\$2,710,680	\$5,357,321	\$2,646,641
Forest Products	14	1,624	1,082,474	1,271,693	2,905,511	1,633,818
*Miscellaneous Industries	25	544	417,502	1,438,987	2,451,810	1,012,823

*Includes Clay Products, Cotton Seed products, Fertilizer, Foundry and Machine Shop products, Food products, etc.

Forest Products.—The forest area is approximately 350,563 acres, comprising 83 per cent of the total land area. More than 20 per cent of the forest area is farm woodland; including some 6,138 acres of woodland pasture. The principal merchantable species are loblolly pine 60 per cent, longleaf pine 20 per cent, gum, ash, and poplar.

The estimated present total stand of 140,000,000 board feet of saw timber is fairly accessible by road, water and rail.

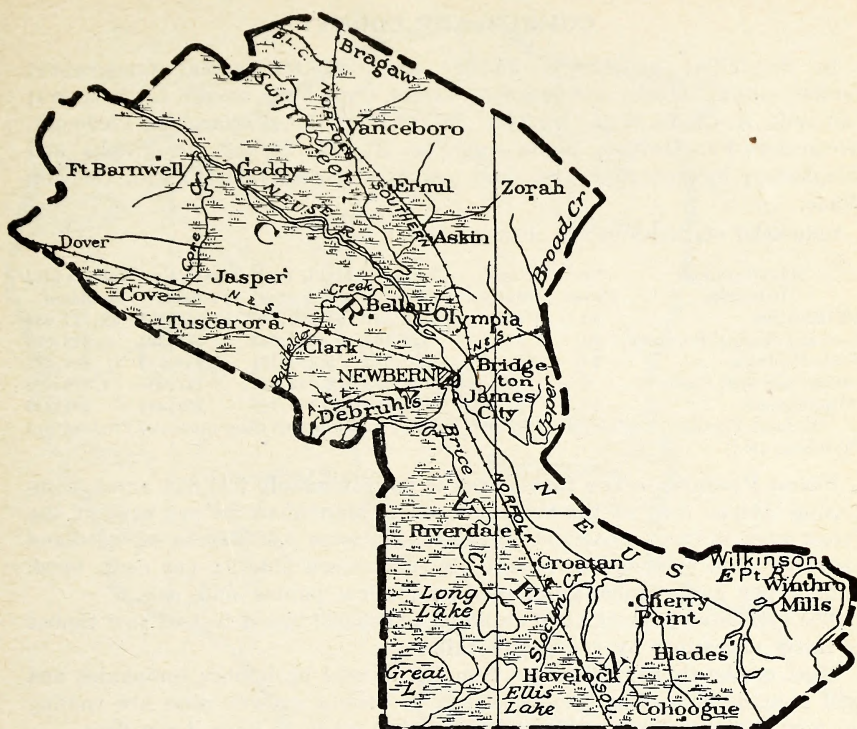
New Bern is the center of the "North Carolina Pine" industry. There are extensive rail and water communications with eastern North Carolina, and the eastern and foreign markets. The policy of forest fire prevention in effect will help to reestablish this source of sawmill.

Some 25 sawmills produce about 40,000,000 board feet of lumber from local logs and an additional 60,000,000 feet from logs cut from surrounding counties. Ties and mine props are also cut. The estimated stumpage value of the timber cut annually exceeds \$200,000.

Mineral Products.—Good marl occurs southeast of New Bern, near Riverdale, in Township One, Cowan Landing and Biddle Landing on the Neuse river, where marl was produced for many years. Analyses show from 89 per cent to 95 per cent calcium carbonate. Some very good clays are found near Riverdale along the railroad. Near Clark, brick clays occur. The mineral production in the county for 1926 was \$45,355.

Water Products.—Craven County, with New Bern, is a trade center, for fishermen within its own bounds as well as from the adjoining territory. Its catch and its handling of marketable fish puts it among the leaders in shippers of water products. Its handling of shellfish and sanitary measures have been especially commended by the National and State health authorities. Its output was: Escallops, 1,217 gallons; oysters, 133,167 bushels. In food fish it produced 1,355,906 pounds, valued at \$80,640.

Water Resources and Power.—Waters: Neuse and Trent rivers; Upper Broad, Swift, Masleys, Core, Batchelder, Palmetto Swamp, and other creeks; Long, Great, and Ellis lakes; shallow wells and artesian underground supplies. Water: Surface; Neuse river, similar to Piedmont streams except where affected by tides; other streams typical eastern waters, Batchelder creek shows water satisfactory for municipal use, with filtration. Underground: shallow wells used by homes and farms,



(Map reduced to two-thirds size)

deeper wells where larger supplies are needed; supplies are ample; chemical and physical qualities rated up to fair. Power: New Bern from 6,570 h. p. municipal electric plant, available to considerable part of county over transmission lines. Vanceboro and customers enroute purchase power over a line from Washington, North Carolina.

Agricultural Products.—While this territory used to be an important commercial trucking territory, tobacco has now gained first place, as indicated by the table below. Cotton production is of minor importance. Quite an important factor in this county's agriculture is its swine, of which 14,151 were sold and slaughtered in 1927. About 15 per cent of the area is in cultivation, with a good percentage of tractors in use.

County Products	56,917 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	26,007	25	650,175	\$ 578,656	\$ 22.25
Tobacco	14,255	681	9,707,655	2,135,684	150.00
Cotton	5,136	213	2,289	222,076	43.24
Soy Beans	2,079	18	37,422	48,649	23.40
Hay (Including Meadow)	6,225	.6	3,903	81,963	12.60
Horses and Mules*			3,078	336,298	
Cattle*			2,029	95,769	
Hogs*			11,386	133,216	

CUMBERLAND COUNTY

In Sandhills; population, 35,000; area, 428,800 acres; topography, fertile, sandy, uplands and swamps; waters, Cape Fear, South, Little rivers; railroads, A. C. L., N. S.; buslines, Safety, Fort Bragg, Carolina, Piedmont, Greensboro-Fayetteville; highways, Nos. 21, 22, 24, 53; telegraphs and telephones; incorporated cities and towns, †Fayetteville, Falcon, Godwin, Wade.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	40	2,155	\$1,264,537	\$4,293,740	\$7,064,824	\$2,771,084
Food and Kindred Products	10	122	124,499	323,645	672,221	348,576
Forest Products	12	445	270,623	1,460,231	1,924,617	464,386
Textiles and their Products	6	1,447	750,962	2,040,822	3,717,004	1,676,182
*Miscellaneous	12	141	118,453	469,042	750,982	281,940

*Includes Fertilizer, Cotton Seed products, Foundry and Machine Shop products, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 321,871 acres, comprising 74 per cent of the total land area. More than 24 per cent of the forest area is farm woodland; this includes some 5,620 acres of woodland pasture. The principal merchantable species are pine 90 per cent, black gum 5 per cent, sweet gum, cypress, yellow poplar and oak.

The estimated present total stand of 50,000,000 board feet of saw timber is fairly accessible by roads and rail.

Most of the timber which yet remains is held by lumber companies and will soon be cut. But thrifty stands of second growth pine are coming in, now that a determined attempt is being made to keep down fires.

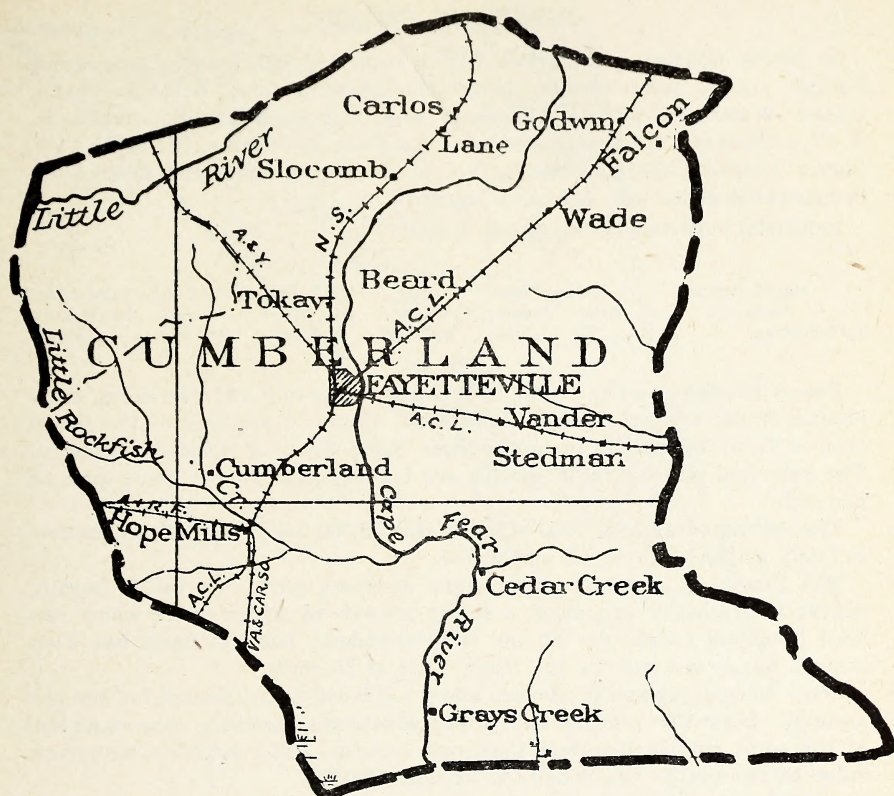
One large and some 40 small sawmills produce about 15,000,000 board feet of lumber per annum. Veneer logs and poles are also cut. The estimated stumpage value of the timber cut annually is around \$60,000.

Mineral Products.—Brick and tile are found in the vicinity of Fayetteville and Slocumb. In the northern part of the county sand and gravel are found.

Total value of the mineral production in the county for 1926 was \$133,065.

Water Resources and Power.—Waters: Cape Fear, South, and Little rivers; Harrison's, Beaver, Cross, Bones, Little Rockfish, Rockfish, and other creeks; shallow and deep wells. Water: Surface supplies: available in most sections and generally preferable to underground supplies except for small consumption; chemical quality, considered good; physical quality, good except for high turbidities prevailing in larger streams. Underground supplies: but little data available; chemical and physical quality known to be good in some instances, poor in others. Power: Generally available over county from transmission system of Carolina Power. Five large capacity lines radiate from Fayetteville in as many directions. Estimates are that 10,000 h. p. can be developed from the Cape Fear River at Smiley Falls.

Agricultural Products.—This county has been noted as of agricultural importance for more than a century. Practically half of the cultivated



area is in cotton, while corn takes second place. It shipped 130 cars of vegetables last year, of which 102 were watermelons. Sixty percent of the land is worked by tenants, and while the land is easily tilled and permits of the most modern implements, only 72 tractors were operated last year. There were 23,460 tons of commercial fertilizers used. Almost 3,000 colonies of bees were reported. The work stock numbered 5,260 head. A few commercial peach orchards are operated. In 1927 17,085 bales of cotton were ginned.

County Products	104,290 Acreage	Yield Per Acre	Production or *Number	Value Total	Value PerAcre
Cotton	51,473	228	24,552	\$2,276,754	\$44.23
Corn	36,895	21	774,795	720,559	19.53
Cow Peas	1,678	9	15,102	28,392	16.92
Oats	2,927	21	61,467	47,944	16.38
Hay (Including Meadow)	3,132	.8	2,470	59,280	19.20
Horses and Mules*			4,396	501,812	
Cattle*			3,110	146,792	
Hogs*			9,378	109,723	

CURRITUCK COUNTY

In North Coastal; population, 7,268; area, 186,880, acres; topography, fertile, sandy, low; waters, New, Northwest rivers; Atlantic ocean, Inland Waterway Canal, Albemarle and Currituck sounds; railroads, N. So.; Albemarle & Chesapeake Canal; buslines, McPherson, Elizabeth City, Lucas, Transit Corp.; highways, No. 34, 344; telegraphs and telephones; incorporated cities and towns, †Currituck.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	3	50	\$22,139	\$16,827	\$56,765	\$39,938

Forest Products.—The forest area is approximately 151,209 acres, comprising 82 per cent of the total land area. About 14 per cent of the forest area is farm woodland; including some 3,309 acres of woodland pasture. The principal merchantable species are loblolly pine 60 per cent, gum 35 per cent.

The estimated present total stand of 45,000,000 board feet of saw timber is fairly accessible by road and water.

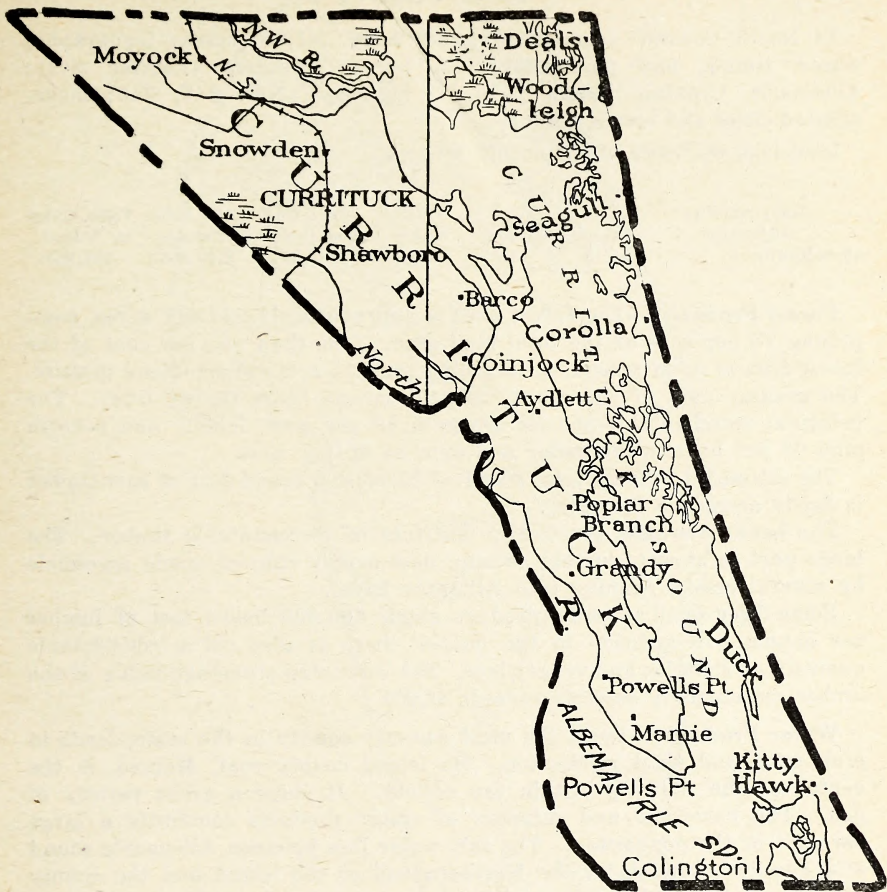
The Dismal swamp extends into the northern part. Its soil is largely peaty; it originally supported a heavy growth of white cedar which has been lumbered. Oak was at one time abundant, but the finest has been cut out for staves and for the Navy Yard at Norfolk.

Some 10 small sawmills produce about 1,500,000 board feet of lumber per annum. Logs for veneers and piling constitute probably three-quarters of the total cut, lumber less than one quarter. The estimate stumpage value of the timber cut annually is around \$60,000.

Water Products.—This is one of the counties in the fresh water areas on the extreme northeastern section of the state. Besides being a county of importance in the commercial fisheries industry it is one of the best sport fishings sections in the state. Fresh water fish, such as bass, perch, rock, sturgeon and pike are the principal fish caught in these waters, and where shipped out of the state find ready markets. One thousand gallons of crab meat was produced in 1927 and food fish to the extent of 160,140 lbs., valued at \$10,515.

Water Resources and Power.—Waters: Atlantic Ocean; Currituck and Albemarle sounds; North river; Inland Waterway canal; shallow and deep well underground supplies. Water: conditions governing supplies are characteristic of northeast section of state. Surface waters are everywhere and although, in many instances, susceptible of development as sources of supply, are little relied upon. Shallow wells furnishing fairly soft and potable water are in greatest use, with deep wells in use in places. Power: No power of a public utility nature.

Agricultural Products.—Early sweet potatoes, Irish potatoes and soy beans are large factors in the crop program of this county. The lower portion, extending into Albemarle sound, is peculiarly fit for early commercial truck production, which will increase with better transportation



(Map reduced to two-thirds size)

facilities. The soil in this county is primarily of the fine, or Portsmouth, sandy loam type. The terrain is flat, but is usually well drained. The production of hogs is important, and a goodly number of dairy cows and sheep are also grown. Currituck is famed for its wild-fowl and game. It is a purely agricultural section.

County Products	34,844 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	17,351	23	399,073	\$319,258	\$18.40
Soy Beans	6,115	15	91,725	105,484	17.25
Sweet Potatoes	4,208	100	420,800	420,800	100.00
Irish Potatoes	3,299	116	382,684	497,489	151.00
Cotton	1,652	215	743	68,195	41.28
Horses and Mules*			1,876	196,620	
Cattle*			2,699	127,393	
Hogs*			10,977	128,431	

DARE COUNTY

In North Coastal; population, 5,300; area, 241,280 acres; topography, water, islands and peninsular, low, barren; waters, Alligator river; Albemarle, Croatan, Pamlico sounds; highways, Nos. 345, 346; incorporated cities and towns, †Manteo.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	3	19	\$10,520	\$87,538	\$122,103	\$34,565

Forest Products.—The forest area is approximately 237,417 acres, comprising 98 per cent of the total land area. Less than one per cent of the forest area is farm woodland; including some 15 acres of woodland pasture. The greater part of the county is held in one large timber tract. The principal merchantable species are gum 40 per cent, lobolly and pocosin pine 25 per cent, white cedar and cypress 25 per cent.

The estimated present total stand of 85,000,000 board feet of saw timber is fairly accessible by water.

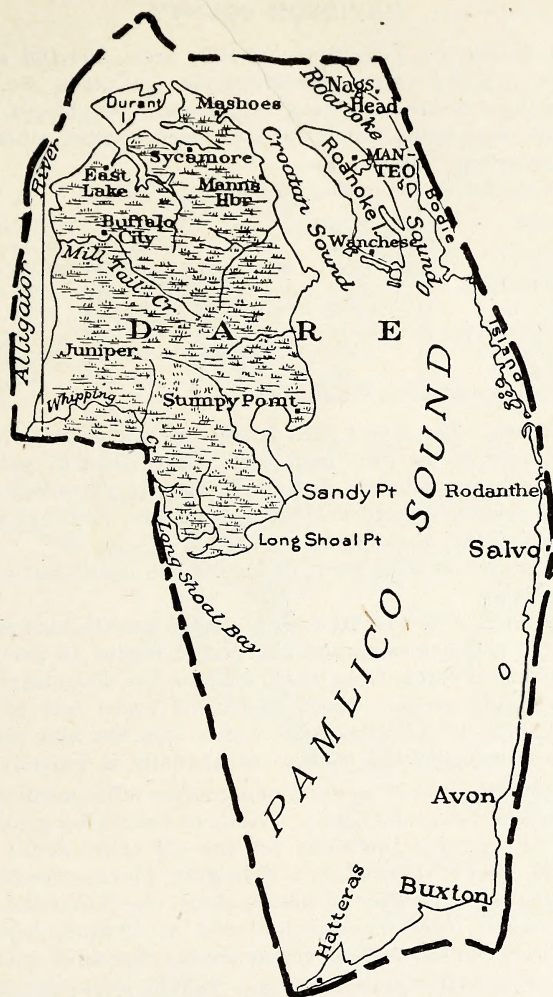
The banks are now practically destitute of merchantable timber. The large part is almost entirely swamp, now mostly cutover, made accessible by several creeks running into Alligator River.

Some three small sawmills produce about 500,000 board feet of lumber per annum. In addition to the lumber there is also cut a considerable quantity of shingles and veneer logs. The estimated stumpage value of the timber cut annually scarcely exceeds \$3,000.

Water Products.—Dare, the most easterly county in the state, leads in crab meat and shad production. Its island county seat, Manteo, is the center of the industry within the county. It ships a great variety of fish. The fishermen and shippers of water products constitute a large per cent of the population. The salt water line between Albemarle sound and Pamlico sound is at the Northern end of the island and the county abounds in both salt water and fresh water fish. In 1927 shellfish produced were: clams 136 bushels, oysters 1,709 bushels, crab meat 14,027 gallons, escallops 188 gallons. Food fish amounted to 1,655,226 pounds valued at \$384,112.

Water Resources and Power.—Waters: Alligator river; Mill Tail and Whippins creeks; Albemarle, Croatan, Roanoke, and Pamlico sounds; Atlantic ocean. Water: Plentiful but largely lacking in those qualities making for potability. Surface sources are practically unused for domestic or industrial use. Cisterns rank first as a source of water supply. Shallow wells are used in many localities and deep wells are scattered over the county. Occasional wells furnish supplies of satisfactory quality but they are an exception. Power: none of a public utility nature.

Agricultural Products.—This county has the smallest area and proportion of land in cultivation of any in the State. The mainland is fairly large, and is principally covered by swamps and timberland. Transportation is limited and most of the people make their living by fishing. Roanoke



(Map reduced to two-thirds size)

Island does a small amount of farming and is well suited for early truck and certain fruits, such as grapes, figs, peaches, etc. Scuppernong grapes cover a large area of the county.

County Products	773 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	207	20	4,140	\$4,140	\$20.00
Sweet Potatoes	108	85	9,180	6,242	58.00
Hay (Including Meadow)	127	1.0	123	2,829	23.00
Horses and Mules*			562	49,630	
Cattle*			1,665	78,588	
Hogs*			1,592	18,626	

DAVIDSON COUNTY

In Central Piedmont; population, 39,100; area, 364,160 acres; topography, fertile, rolling; waters, Yadkin river; railroads, So., N. & So., W. S. So.; buslines, Southern, Camel City, Central; highways, Nos. 10, 61, 62, 66, 90, 109; telegraphs and telephones; incorporated cities and towns, ‡Denton, *Lexington, *Thomasville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	69	5,564	\$4,477,753	\$11,945,890	\$20,389,086	\$8,443,196
Food and Kindred Products	15	88	78,298	611,913	931,619	319,706
Furniture	14	2,222	1,880,593	4,860,349	8,216,265	3,355,916
Other Wood Using Industries	14	254	232,213	491,083	961,294	470,211
Textiles and Their Products	14	2,937	2,158,536	5,659,441	9,650,544	3,991,103
*Miscellaneous Industries	12	63	128,113	323,104	629,364	306,260

*Includes Printing and Publishing, Stone and Clay products, etc.

Forest Products.—The forest area is approximately 182,698 acres, comprising 50 per cent of the total land area. More than 67 per cent of the forest area is farm woodland; including some 16,096 acres of woodland pasture. The principal merchantable species are shortleaf pine 60 per cent, oak 25 per cent, and poplar.

The estimated present total stand of 110,000,000 board feet of saw timber is fairly accessible.

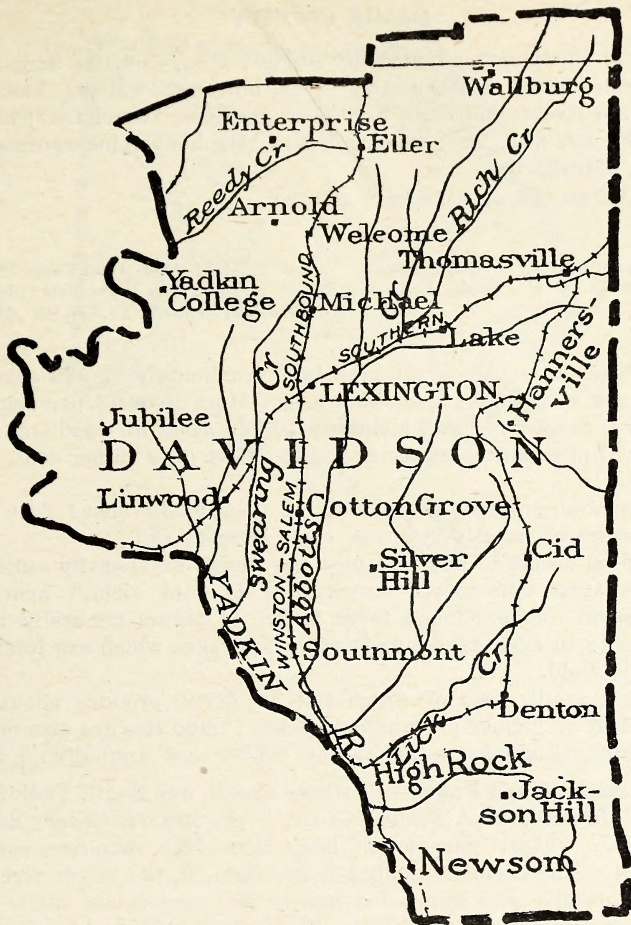
Some 60 per cent of the forest area is second growth pine on abandoned farm land. The original hardwood and pine occupies 15 per cent and 35 per cent is hardwood forest from which all pine has disappeared.

Some 35 sawmills produce about 15,000,000 board feet of lumber per annum. A quantity of ties and some veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—About one and one-quarter miles north of Lexington several small granite deposits occur. North of Lexington granite outcrops are found which supplied the stone for the old court house and on the Mocksville road, west of Lexington, a light gray, biotite granite is exposed. Basic rocks occur at a number of places along the Mocksville road. Just south of Lexington, near Thomasville, and at Denton, brick clay and shale occur. Mineral production of the county for 1926 was \$19,000.

Water Resources and Power.—Waters: Yadkin river; Cabin, Lick, Flat Swamp, Abbott's, Rich, Swearing, First Potts, Second Potts, Reedy, Muddy, and other creeks; High Rock lake. Water: Numerous surface supply sources available; chemical quality, excellent; physical quality, excellent generally but moderately high turbidities prevail in larger streams. Power: High Rock hydro-electric development on Yadkin river (partly in Rowan county), Duke Power. Service is available to county from four two-circuit 100,000-volt lines crossing county and from lower voltage lines radiating from Lexington. Rural power lines are available in a number of sections. The power available is practically unlimited. Some undeveloped power is estimated.

Agricultural Products.—This is the State's largest wheat growing county, and is otherwise one of the most attractive agricultural areas of the State; throughout this county there are apparent evidences of good living and prosperity. It has a rich soil, suitable for almost all crops.



Davidson, like Randolph and Rowan counties, has more acreage in wheat than in any other crop. This territory is especially suitable for livestock, with its necessary feed crops. Over 1,400 acres are reported as being devoted to field truck and over 1,200 acres to home gardens. Almost 500 farm tractors are reported, only exceeded by Rowan County. Lying in the heart of the Piedmont Belt, on No. 10 highway, between Greensboro, Salisbury and Charlotte, and with its relatively low-priced land, this county offers many opportunities.

County Products	101,802 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Wheat	32,568	13	423,384	\$592,738	\$18.20
Corn	24,127	24	579,048	497,981	20.64
Oats	6,287	22	138,314	85,755	13.64
Cotton	5,020	241	2,531	239,544	47.72
Hay (Including Meadow)	9,342	1.2	11,559	254,298	26.40
Horses and Mules*			5,615	573,941	
Cattle*			7,817	368,962	
Hogs*			9,093	106,388	

DAVIE COUNTY

In Central Piedmont; population, 13,700; area, 165,120 acres; topography, fertile, hilly, plateau and river bottoms; waters, Yadkin and South Yadkin rivers; railroads, Southern; buslines, Camel City; highways, Nos. 65, 80, 90, 801, 901; telegraph and telephones; incorporated cities and towns, Mocksville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	7	835	\$550,322	\$1,669,657	\$2,839,149	\$1,169,492

Forest Products.—The forest area is approximately 73,680 acres, comprising 45 per cent of the total land area. More than 72 per cent of the forest area is farm woodland including 10,580 acres of woodland pasture. The principal merchantable species are shortleaf pine 75 per cent, and oak 20 per cent.

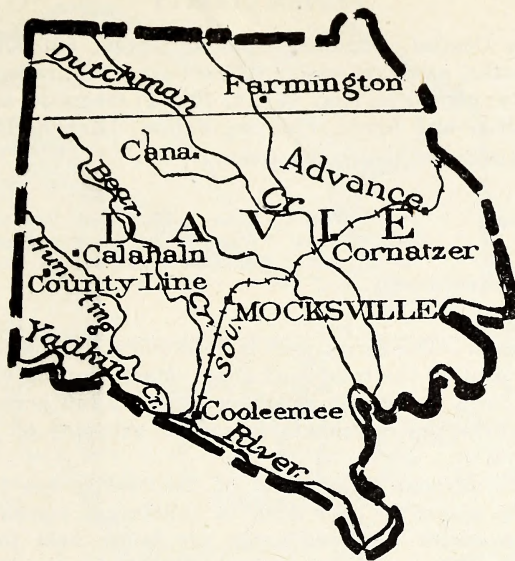
The estimated present total stand of 55,000,000 board feet of saw timber is accessible mostly by roads, some little by rail.

The original forest of oak and pine has been very heavily culled. The type of greatest commercial importance is "old field," nearly pure stands come in on abandoned farm land. It occurs generally throughout the county in even aged stands of various ages which are lumbered at 25 to 75 years old.

Some 17 sawmills, two of which run regularly, produce about 2,700,000 board feet of lumber per annum. Some 17,000 ties are also produced. The estimated stumpage value of the timber cut annually is \$18,000.

Water Resources and Power.—Waters: Yadkin and South Yadkin rivers; Dutchman, Hunting, East Branch Cedar, West Branch Cedar, Bear, and other creeks. Water: Streams of large size offer numerous sources of water supply. The chemical quality is excellent, in the larger streams the prevailing turbidity and suspended matter are moderately high. Power: Double transmission circuits of Duke Power cross county in northeasterly direction, offer unlimited service. An 1,800 h.p. hydro-electric plant is operated by that company on the Yadkin River at Idols.

Agricultural Products.—Much good farming is found here. Since few farmers became interested in barley, a large expansion has been made in this crop. It is naturally suited to small grains, while cotton and tobacco are grown to an appreciable amount. About 40 per cent of the area is under cultivation. There are about 50,000 hens, 3,400 milch cows, 150 tractors and a considerable area in hay crops. Dairy farming is practiced to a considerable extent and could be expanded advantageously.



County Products	48,450 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	14,775	24	354,600	\$308,502	\$20.88
Wheat	11,177	11	122,947	164,749	14.74
Cotton	7,140	237	3,540	328,283	45.98
Oats	2,815	20	56,300	37,158	16.78
Hay (Including Meadow)	5,962	.8	4,765	100,065	16.80
Horses and Mules*			2,771	290,453	
Cattle			4,707	222,170	
Hogs*			3,813	44,612	

DUPLIN COUNTY

In Southern Coastal; population, 33,400; area, 505,600 acres; topography, low fertile, swamps; waters, Cape Fear river; railroads, A. C. L.; buslines, Safety; highways, Nos. 11, 24, 40, 41; telegraph and telephones; incorporated cities and towns, Calypso, Faison, †Kenansville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	15	649	\$458,920	\$302,491	\$1,120,584	\$818,093

Forest products leading industry.

Forest Products.—The forest area is approximately 356,109 acres, comprising 72 per cent of the total land area. More than 39 per cent of the forest area is farm woodland; including some 12,300 acres of woodland pasture. The principal merchantable species are pine 82 per cent, and gum 12 per cent.

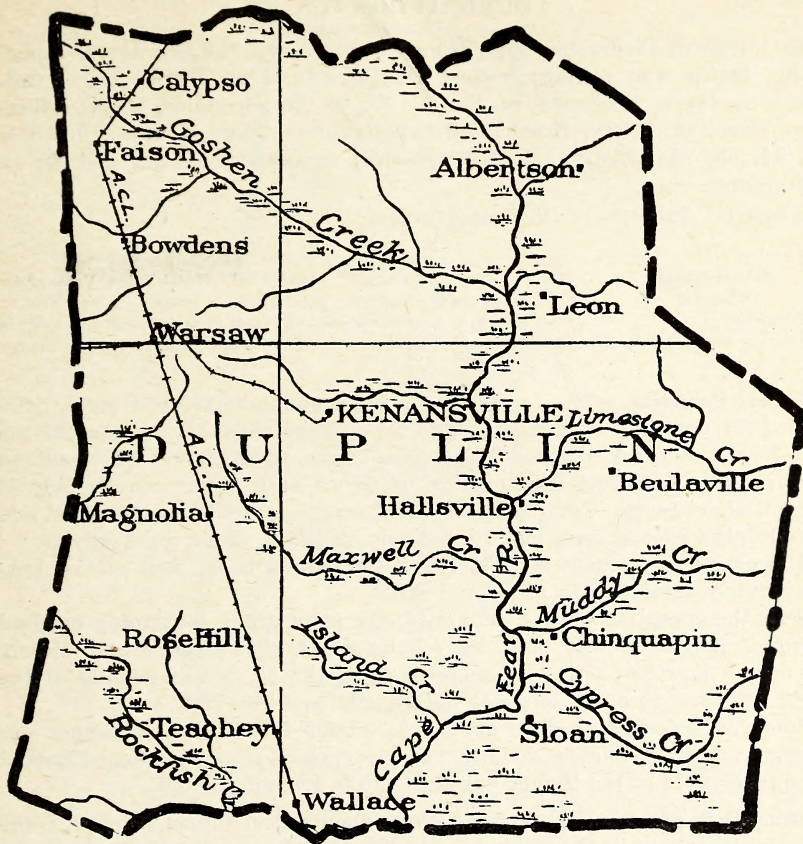
The estimated present total stand of 280,000,000 board feet of saw timber is fairly accessible over good or indifferent roads.

Some of the larger timbered areas are being held for increase in stumpage price. This is in large part responsible for the heavy stands in some of the swamps and on some of the burnt pine areas. The practice of forest fire prevention is now well established.

One large and some 40 small sawmills produce about 25,000,000 board feet of lumber per annum. Some veneer logs are also cut. The estimated stumpage value of the timber cut annually is \$100,000.

Water Resources and Power.—Waters: Northeast, Cape Fear rivers; Doctor's, Rock Fish, Stewart's, Maxwell Island, Marsh, Goshen, Limestone, Muddy, Burncoat, and other creeks. Water: Available from both surface and underground sources in practically all sections. Characteristics of the surface supplies, typical to eastern North Carolina, necessitate filtration in most instances to insure potability, and shallow well waters are in more general use. Information adequate to base a general classification on is not available. Power: The Tidewater Power covers several sections with transmission lines and service can be had elsewhere as needs justify extension.

Agricultural Products.—Tobacco and cotton show a large acreage and are principal crops in this county yet the trucking industry is of importance. The commercial truck farming area is probably the most extensive in the state. Truck farming is done throughout the length of the county, along the railway, and 2,302 cars of produce were shipped in 1927, the record for North Carolina counties. Shipments were: Strawberries, 1,123 cars; Irish potatoes, 525 cars; cucumbers, 380; watermelons, 160; canteloupes, 37; string beans, 34; English peas, 32, and many others of mixed vegetables. The planting of cotton is declining, with tobacco gaining in importance. Twenty-eight thousand three hundred eighty tons of commercial fertilizers were used.



County Products	103,859 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	46,657	21	979,797	\$ 989,595	\$ 21.21
Tobacco	19,116	845	16,153,020	3,230,604	169.00
Cotton	17,331	231	8,375	790,675	45.05
Irish Potatoes	4,087	129	527,223	764,473	187.00
Hay (Including Meadow)	6,943	.7	4,500	95,985	14.93
Horses and Mules*			6,312	692,216	
Cattle*			3,769	177,897	
Hogs*			29,882	349,619	

DURHAM COUNTY

In Northern Piedmont; population, 46,900; area 199,680 acres, topography, fertile and rolling; waters, Neuse, Eno, Flat, Little rivers; railroads, Southern, Seaboard, N. So., N. W., D. So.; buslines, Durham-Roxboro, Carolina Safety, Greensboro-Fayetteville; highways, Nos. 10, 10-A, 13, 54, 55, 75; telegraph and telephones; incorporated cities and towns, *†Durham.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	62	8,846	\$6,040,955	\$36,971,405	\$106,865,989	\$69,894,584

Cotton Yarns, Hosiery, Tobacco products, Mattresses, etc., are leading products in this county.

Forest Products.—The forest area is approximately 145,828 acres, comprising 73 per cent of the total land area. More than 45 per cent of the forest area is farm woodland; including some 12,261 acres of woodland pasture. Of the forest land outside of farms only 5 per cent is held in large timber tracts. The principal merchantable species are shortleaf and loblolly pine 80 per cent, oak 10 per cent, hickory, sweet gum, poplar.

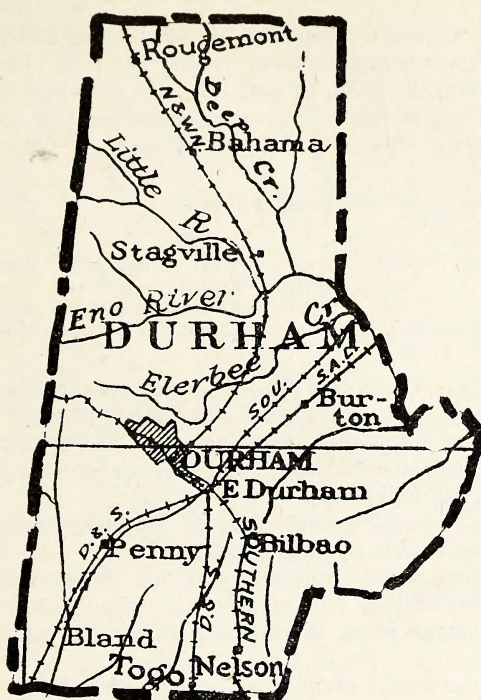
The estimated present total stand of 40,000,000 board feet of saw timber is fairly accessible by roads and rail.

With the exception of one or more large plantations containing original stand of hardwood and pine, all of the areas have been pretty closely cut over. Shortleaf is the abundant pine of the north and loblolly of the south. Spruce pine and longleaf both occur.

Some 20 sawmills produce about 15,000,000 board feet of lumber per annum. A considerable quantity of ties are also cut. The estimated stumpage value of the timber cut annually is around \$65,000.

Mineral Products.—There is an abundance of very good brick and tile clays which occur in the Triassic sandstone belt, extending in a northeast and southwest direction entirely across the county. The red sandstone of the Triassic was quarried from time to time but the industry has practically ceased. Cutting the Triassic area are a series of diabase dikes, some of them 500 feet in width, which have been used for building and road material. Mineral production in the county for 1926 was valued at \$146,000.

Water Resources and Power.—Waters: Flat, North and South Fork and Little River proper, Eno and Neuse rivers; Dial, Dry, Rocky, Buffalo, Mountain, Cabin, Ellerbe, New Hope, Northeast, Lick, Chunky Pipe, and Panther creeks; Michie lake on Flat river. Water: Surface supply, generally available over county, many capable large yields; chemical, comparable Piedmont waters, satisfactory for industrial use and physical qualities when pollution is not present. Filtration ordinarily required. Power: Double circuit 100,000 volt transmission lines of Duke Power cross county, southeast via Durham, primary source of power. Distribution by Durham Public Service Co., from Durham as center, to greater part of county. In development water supply of Flat River, Durham has generating capacity of 2,500 h. p. sold in part to the Durham Public Service Co.



Agricultural Products.—This county has a varied type of soil, ranging from the red Cecil clay in the north and west to the light and sandy types in the east and south. Small grains are grown in the stiff soils, while tobacco is more adapted to the lighter types. This is one of the oldest tobacco counties in North Carolina, where the Dukes founded their tobacco factories. Durham city is the second largest of the old type tobacco markets, selling about 23,000,000 pounds of the farmers' crop last year. With a fair diversification of crops, it is typical of this area. The advantages accruing to agriculture through its hard-surfaced highways are probably not surpassed in the state.

County Products	41,246 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	15,817	23	363,791	\$ 363,791	\$ 23.00
Tobacco	9,290	630	5,852,700	1,463,175	158.00
Wheat	3,047	10	30,470	43,572	14.30
Cotton	3,116	230	1,499	146,919	47.15
Hay (Including Meadow)	2,403	1.4	3,245	68,145	229.40
Horses and Mules*			3,019	311,517	
Cattle*			4,046	190,971	
Hogs*			3,236	37,861	

EDGECOMBE COUNTY

Piedmont and Coastal; population, 42,000; area, 325,760 acres; topography, fertile, uplands and swamps; waters, Tar river; railroads, A. C. L., E. C.; buslines, Transit, Nash, C. & C., G. & O. Co.; highways, Nos 12, 40, 42, 90; telegraph and telephones; incorporated cities and towns, Battleboro, Conetoe, Fountain, Pinetops, *Rocky Mount, †*Tarboro, Whitakers, Princeville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	36	2,313	\$2,471,045	\$5,469,978	\$8,871,238	\$3,401,260
Large Railroad Repair Shop, Fertilizer, Cotton Seed products and Lumber also produced.						

Forest Products.—The forest area is approximately 191,821 acres, comprising 58 per cent of the total land area. More than 40 per cent of the forest area is farm woodland; including some 12,548 acres of woodland pasture. The principal merchantable species are loblolly pine 75 per cent, gum 15 per cent, oak 5 per cent.

The estimated present total stand of 100,000,000 board feet of saw timber is fairly accessible by roads and rail.

The longleaf pine, which originally occupied the greater part, has been cut off and the prevailing loblolly pine has taken its place. The occasional cypress swamps along the streams have been lumbered from time to time.

Some 15 small sawmills produce about 5,000,000 board feet of lumber per annum. Saw logs, ties and veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$40,000.

Water Resources and Power.—Waters: Tar river; Beech, Swift, White-oak, Maple, Fishing, Deep, Conetoe, Town, Cokey Swamp, Bynum Mill, and other creeks. Water: Numerous surface sources typical of the eastern Piedmont section. Chemical quality, considered good; physical quality, good except for moderately high turbidity, and in some instances color. Power: Rocky Mount Municipal plant, 12,600 h.p. (steam); Tarboro municipal plant, 2,850 h.p. (combination fuel); Virginia Electric and Power Co. plant at Tarboro, 2,050 h.p. (steam); transmission lines from one or more of above sources makes ample power available generally over county. The development of privately owned "rural power" lines is extensive.

Agricultural Products.—A large proportion of this county is under cultivation, and while of Coastal Plain type, having a level topography, it has a diversity of crops and soils. On the eastern and northwestern portions are grown potatoes and truck crops. About 13 per cent is in peanuts, 16 per cent in tobacco and 8 per cent in hays and truck, and 39 per cent being in cotton. In 1927 the farmers disposed of 1,169 hogs, and used 37,767 tons of fertilizer. The ginnings last year showed 26,333 bales, while the Tarboro tobacco market sold 6,188,000 pounds of the farmers' product. This county shipped 834 cars of various vegetables in 1927. Approximately 85 per cent of the farm land is worked by tenants.



County Products	136,043 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	53,157	248	27,579	\$2,610,221	\$49.10
Corn	33,673	20	673,460	639,787	19.00
Tobacco	21,357	760	16,231,320	3,733,204	175.00
Peanuts	15,669	952	14,916,888	745,844	42.75
Hay (Including Meadow)	10,176	.5	4,751	102,147	10.75
Horses and Mules*			7,942	906,026	
Cattle*			2,782	131,310	
Hogs*			13,772	161,132	

FORSYTH COUNTY

In Upper Piedmont; population, 97,300; area, 240,640 acres; topography, low foothills, fertile plateau; waters, Yadkin river; railroads, N. & W., So., W. S.; buslines, Camel City, Elkin & Alleghany, Central; highways, Nos. 60, 65, 66, 77; telegraphs and telephones; incorporated cities and towns, Kernersville, ‡*Winston-Salem.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added By Manuf.
All Industries	103	18,712	\$15,097,450	\$102,396,261	\$302,571,980	\$200,175,719
Food and Kindred Products	26	211	207,081	1,135,270	2,105,980	970,710
Furniture	9	1,499	1,316,333	3,464,444	6,132,547	2,668,103
Other Forest Products	11	320	243,263	993,157	1,544,265	555,108
Printing and Publishing	11	169	262,173	270,994	1,060,274	789,280
Textiles and their Product	12	3,569	2,687,337	8,302,240	14,250,664	5,948,424
*Miscellaneous	34	12,944	10,381,263	88,230,156	277,478,250	189,248,094

*Includes Concrete products, Clay and Stone products, Gas, Tobacco products, etc.

Forest Products.—The forest area is approximately 117,009 acres, comprising 48 per cent of the total land area. More than 69 per cent of the forest area is farm woodland; including some 12,559 acres of woodland pasture. The principal merchantable species are shortleaf pine 75 per cent, oak 15 per cent, hickory and poplar.

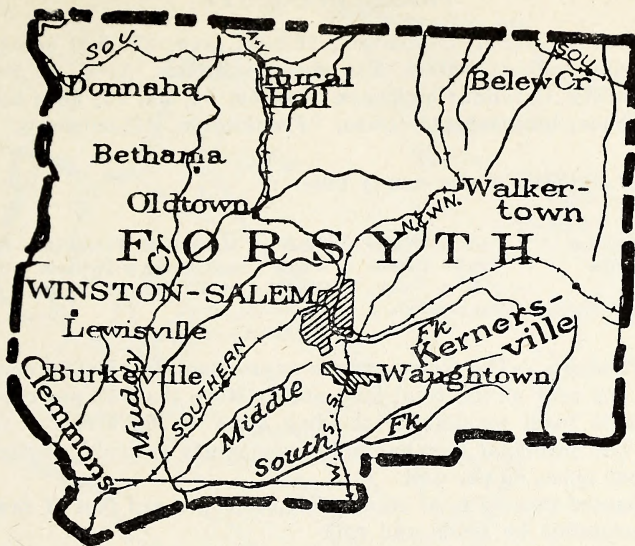
The estimated present total stand of 35,000,000 board feet of saw timber is fairly accessible by roads and rail.

In the pine and oak forests and in the second-growth pine, the shortleaf pine is most abundant, not more than 10 per cent of the pine being scrub pine and this species being found in certain parts of the county.

Some 30 sawmills produce about 12,000,000 board feet of lumber per annum. A considerable quantity of veneer logs and ties are also cut. The estimated stumpage value of the timber cut annually is around \$60,000.

Mineral Products.—In the extreme northwestern part of the county is an area of the Triassic clays and shales suitable for brick and tile. The principal areas of granite in the county are limited to the southeastern and eastern portions, extending from near Winston-Salem southward and eastward into Guilford and Davidson. Porphyritic granite occurs five miles south of Winston on the Lexington road. Sand and gravel suitable for road material occurs in the stream beds at several places in the county. Foliated talc occurs in small lenses to the west of Winston-Salem. Mineral production in the county for 1926 amounted to \$188,550.

Water Resources and Power.—Waters: Yadkin river; Muddy, Middle Fork Muddy, South Fork Muddy, Abbott's, Belews, Buffalo, and other creeks. Water: Sources of surface supply are generally available over the county. The chemical quality for all uses is considered excellent. Moderately high turbidities prevail in the larger streams but other physical qualities are generally good. Power: Duke Power hydro-electric plant of 1,800 h.p. at Idols on Yadkin river jointly with Davie county. Five transmission circuits of this company radiate from Winston-Salem, and ample power can be made available in any section of county. In part, the transmission lines parallel the railroads.



Agricultural Products.—Forsyth county is synonymous with tobacco, both as a center of production as well as manufacture. Winston-Salem markets last year sold about 56,000,000 pounds for the growers, bringing them over \$11,000,000. The county however produced tobacco on only about 14 per cent of its cultivated acreage, being outranked considerably by its wheat and corn acreage. This county is well adapted to most crops, cotton is being grown to a very limited extent, as this county is the extreme northern border of the belt. It is a typical small grain territory. Hays are grown on 21 per cent of the cultivated acreage, while pasture grasses are naturally very good. Dairying is a growing industry. 319 tractors were operated last year, a progressive record for a relatively small county. About 40 per cent of its area is under cultivation.

County Products	75,908 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	20,765	26	539,890	\$ 518,294	\$ 24.96
Wheat	15,604	11	171,644	250,600	16.06
Tobacco	10,821	683	7,390,743	1,625,963	150.00
Oats	5,361	20	107,220	80,415	15.00
Hay (Including Meadow)	10,879	1.1	12,319	258,699	23.10
Horses and Mules*			4,956	512,548	
Cattle*			7,335	346,212	
Hogs*			7,546	88,288	

FRANKLIN COUNTY

In Northwest Coastal; population, 28,000; area, 299,520 acres; topography, fertile, rolling; waters, Tar river; railroads, A. C. L. Seaboard; buslines, Safety, Carolina; highways, Nos. 50, 56, 58, 90, 561; telegraphs and telephones; incorporated towns, *Franklinton, *‡Louisburg, Youngs-ville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manfu.
All Industries	13	653	\$437,102	\$1,577,983	\$2,329,558	\$751,575
Lumber and Textiles leading products.						

Forest Products.—The forest area is approximately 180,520 acres, comprising 60 per cent of the total land area. More than 47 per cent of the forest area is farm woodland; including some 15,400 acres of woodland pasture. The principal merchantable species are second growth loblolly and shortleaf pines, 85 per cent.

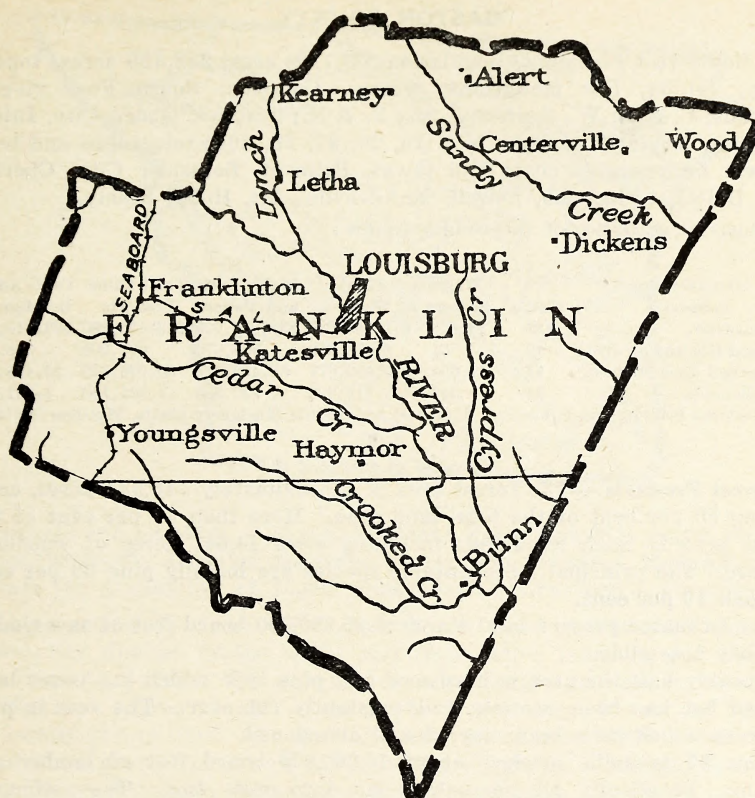
The estimated present total stand of 90,000,000 board feet of saw timber is fairly accessible by roads and rail.

The forest types are divided approximately: Second growth pine 70 per cent, hardwoods 20 per cent; old growth or original pine and hardwoods 10 per cent. Longleaf pine mixed with hardwoods occurs in several places along the eastern side.

Some 30 sawmills are operating in the county producing about 30,000,000 board feet of lumber per annum. A good many ties are also cut. The estimated stumpage value of the timber cut annually is around \$140,000.

Water Resources and Power.—Waters: Tar river; Sandy, Lynch, Cypress, Crooked, Cedar, Moccasin, and other creeks. Water: Sources of surface supply of excellent chemical quality available in practically all sections. Tar River largest. Physical characteristics typical of Piedmont, ordinarily necessitate sedimentation or filtration. Power: Western section served by Carolina Power and Light which can extend lines over county as needed. Louisburg has 300 h. p. municipal steam plant.

Agricultural Products.—While primarily a cotton county, tobacco is also an important factor here. It is located on the eastern border of the "old belt" type of tobacco. The soil while not particularly fertile, responds admirably to good treatment. Over 3,000 tenants operate over two-thirds of the cultivated land amounting to about 35 per cent of the total acreage, 20,000 tons of fertilizers were used last year and 75 tractors were credited to this county last year.



County Products	94,778 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	38,957	251	20,457	\$1,857,859	\$47.69
Corn	32,075	20	641,500	641,500	19.59
Tobacco	16,393	655	10,737,415	2,362,231	144.00
Cow Peas	339	13	4,407	8,373	24.70
Sweet Potatoes	1,012	109	110,308	82,731	82.00
Horses and Mules*			5,658	624,278	
Cattle*			4,190	197,768	
Hogs*			7,244	84,755	

GASTON COUNTY

In Southwest Piedmont; population, 60,710; area, 232,320 acres; topography, rolling, low mountains; waters, Catawba, South Fork rivers; railroads, C. & N. W., Seaboard, So., P. & N.; buslines, Queen City, Inter-carolinas, Hoyle; Highways, Nos. 16, 20, 27, 29, 206; telegraphs and telephones; incorporated cities and towns, Belmont, Bessemer City, Cherryville, Dallas, ‡*Gastonia, Lowell, McAdenville, Mt. Holly, Stanly.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	125	18,008	\$13,155,249	\$39,514,928	\$63,425,280	\$23,910,352
Food and Kindred products	10	61	78,652	298,670	627,205	328,535
Textiles and their products	81	17,604	12,660,677	38,495,975	60,976,325	22,480,350
*Miscellaneous	34	343	415,920	720,283	1,821,750	1,101,467

*Includes Printing and Publishing, Foundries and Textile Machinery plants, Mattress factories, etc.

Forest Products.—The forest area is approximately 115,941 acres, comprising 50 per cent of the total land area. More than 40 per cent of the forest area is farm woodland; including some 14,661 acres of woodland pasture. The principal merchantable species are loblolly pine 90 per cent and oak 10 per cent.

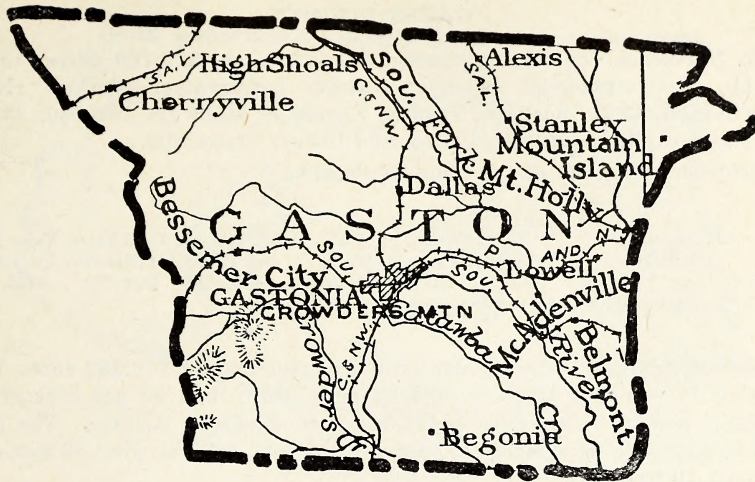
The estimated present total stand of 35,000,000 board feet of saw timber is fairly accessible.

Probably half the area is hardwood and pine type which has never been cleared but has been severely and constantly cut over. The rest is pine on areas which have been cleared and abandoned.

Some 35 sawmills produce about 10,000,000 board feet of lumber per annum. Practically all the oak is cut into cross ties. The estimated stumpage value of the timber cut annually, exclusive of some 30,000 cords of firewood, is around \$50,000.

Mineral Products.—Five miles south of Bessemer City barite bearing veins occur associated with quartz, galena, and sphalerite. The limestone in this county is an extension of the belt which occurs in the southeastern part of Cleveland. Tin ore (cassiterite) occurs seven miles northeast of Kings Mountain. Near Mt. Holly quartz suitable for ceramic trade is found and near Mt. Holly and Belmont, river bottom and residual clays, suitable for brick manufacture, are found. Mineral production for 1926 was \$168,738.

Water Resources and Power.—Catawba and South Fork Catawba rivers; Dutchman's, Stanley, Hoyles, Fites, Little Beaverdam, Battle Shoal, Long, Duharts, Catawba, Crowder, Lick Fork, and other creeks; New Catawba and Mountain Island Station lakes (in part) and large pond on Crowders Creek. Water: Chemical quality, generally excellent; physical quality, good except for moderately high turbidity prevailing in larger streams. Power: Duke Power plants are as follows: 82,400 h. p., hydro, at Mountain Island on Catawba river (partly in Mecklenburg county); 1,000 h. p. hydro, at Spencer mountain on South Fork Catawba river; 570 h. p., hydro, at Tuckaseegee on the Catawba river (partly in Mecklenburg



county); and 50,000 h. p. steam, at Mount Holly. Power is amply available over the county from an extensive transmission system. Estimations indicate the availability of 10,000 undeveloped hydro-electric horsepower.

Agricultural Products.—This county has more cotton mills than any other like district in the world and such active industry and labor to feed should warrant the growing of considerable acreage in truck and fruit crops. Even though cotton is the largest crop, it may be disposed of locally at any time. The ginnings last year showed 12,459 bales. Small grains are grown extensively in the northern portion. The land in cultivation is approximately 50 percent of the total area. While it had 5,131 milch cows in 1927 ample opportunities offer for a larger development of this industry. With more than 200 tractors active, and 4,436 head of farm work stock, there is evidently a large agricultural activity. The soil is quite varied and invites a diversified program.

County Products	80,797 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	27,639	242	13,993	\$1,371,171	\$49.61
Corn	26,733	21	561,477	544,633	20.37
Wheat	7,595	12	91,140	136,710	18.00
Oats	5,034	20	100,680	73,496	14.60
Hay (Including Meadow)	3,914	1.2	4,689	117,225	30.00
Horses and Mules*			4,058	454,550	
Cattle*			6,918	326,530	
Hogs*			4,616	54,007	

GATES COUNTY

In Northeast Coastal; population, 10,600; area, 229,760 acres; topography, piney uplands, swamps; waters, Blackwater, Chowan rivers; railroads, A. C. L.; buslines, Transit, Edgerton; highways, Nos. 30, 32, 34, 321; telegraph; incorporated cities and towns, †Gatesville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	4	231	\$126,793	\$98,484	\$276,729	\$178,245

All Lumber establishments in this county.

Forest Products.—The forest area is approximately 178,682 acres, comprising 77 per cent of the total land area. More than 30 per cent of this is farm woodland including 10,011 acres of woodland pasture. The principal merchantable species are gum 35 per cent, loblolly pine 30 per cent, cypress 10 per cent.

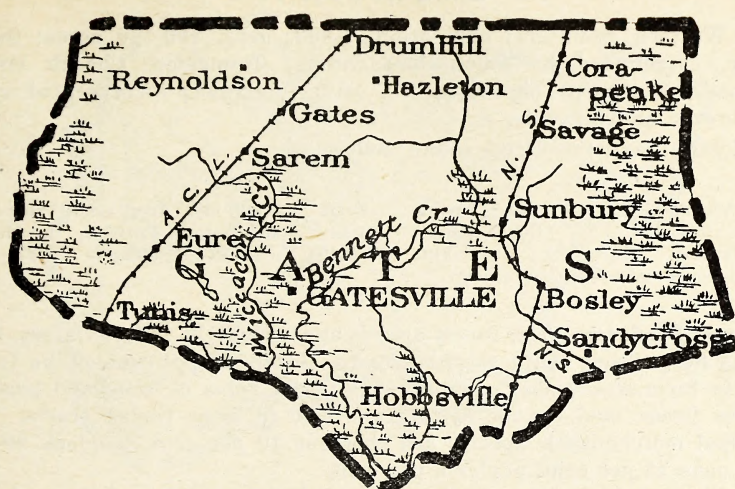
The estimated present total stand of 180,000,000 board feet of saw timber is fairly accessible by roads to water or rail.

About one-fourth of forest land is in Dismal swamp and is owned by large landowners. Several other large companies own large tracts. Balance, or about one-third in hand of small landowners. There are broad areas of swamp lands along the Chowan river.

Some 14 small sawmills produce about 2,000,000 board feet of lumber per annum or only about 10 per cent of the total cut. Veneer logs, staves and piling make up the bulk of the output. The estimated stumpage value of the timber cut annually is around \$90,000.

Water Resources and Power.—Waters: Chowan river; Cole, Bennett, Duke's Swamp, and Catherine creeks; Taylor's Millpond, Lilley's Millpond, Merchant's Millpond, Hunter's Millpond, and Welsh ponds. Water: Detailed data on the waters of this county are nonexistent but from the similarity of the region to the adjacent sections of eastern Carolina it can be judged that the surface waters are typical of the region and that they can be used with entire success after proper filtration. Power: A 100,000 volt transmission line of the Virginia Electric crosses the county from north to south and that company is prepared to render any reasonable power requirement.

Agricultural Products.—The peanut crop is the most important crop in the county. While a relatively small proportion of the county is in cultivation, the soil types and prices of land offer good opportunities for development. The principal highway to Norfolk, Va., runs through the western portion of the county. Most of the land is cultivated by owners. The interest in swine is indicated by the 14,528 hogs sold and slaughtered in 1927.



County Products	45,099 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	13,838	25	345,950	\$373,626	\$27.00
Peanuts	13,679	930	12,721,470	636,074	46.50
Cotton	8,809	267	4,921	470,401	53.40
Sweet Potatoes	1,029	112	115,248	80,674	78.00
Hay (Including Meadow)	1,752	.5	889	19,558	11.00
Horses and Mules*			2,667	284,765	
Cattle*			1,563	73,774	
Hogs*			13,507	158,032	

GRAHAM COUNTY

In Western Mountain; population, 5,000; area, 190,720 acres; topography, surrounded by mountains; waters, Tennessee, Cheoah rivers; railroads, Southern; highways, No. 108; telegraph; incorporated cities and towns, †Robbinsville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	5	210	\$245,190	\$83,077	\$438,409	\$355,332
All Lumber mills in Graham county.						

Forest Products.—The forest area is approximately 164,608 acres, comprising 86 per cent of the total land area. Barely 15 per cent of the forest area is farm woodland; including some 4,000 acres of woodland pasture. All the forest land outside of farms is held in large timber tracts. The principal merchantable species are chestnut 40 per cent, hemlock 20 per cent, oaks 15 per cent, poplar 5 per cent.

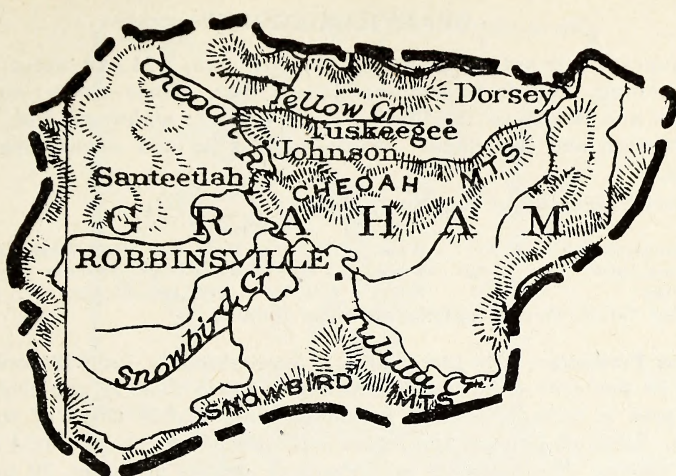
The estimated present total stand of 410,000,000 board feet of saw timber is chiefly located in the southwest portion of the county. There is probably more high grade virgin hardwood timber in Graham than in any other county in the State.

Some 10 sawmills produce about 12,000,000 board feet of lumber per annum. In addition to the lumber a considerable quantity of ties are cut and pulpwood produced each year. The estimated stumpage value of the timber cut annually is around \$90,000.

Mineral Products.—In the north end of the Nantahala Mountains near the Macon and Swain county lines, amphibole asbestoes occurs. It has been reported that copper ores occur near the Cheoah hydro-electric dam in the extreme northwestern part of the county, constituting an extension of the Swain county copper deposit.

Water Resources and Power.—Waters: Little Tennessee and Cheoah rivers; Cheoah lake on Little Tennessee river and Santeetlah lake on Cheoah river; Santeetlah, Yellow, Tulula, Snowbird, Stekoah, Panther, and other creeks. Water: Uniformly excellent character in all respects, typical of mountain waters of western North Carolina. Power: Little Tennessee river has been developed for 96,000 h. p., and the Cheoah river for 66,000, both by the Tallassee Power Company, which uses the power in the manufacture of aluminum in plants located in Tennessee. Undeveloped hydro-electric horsepower of 112,100 is estimated to be available on the Little Tennessee river; distribution facilities are not yet general.

Agricultural Products.—Graham county has less farm land than any other county but one in the state, while being rated as having the highest per-capita wealth. This is a timber and lumber county. Deforestation has opened up the way for livestock grazing. It reported only one tractor. On the small area cultivated, the usual mountain county crops are grown.



County Products	7,477 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	5,655	22	124,410	\$115,701	\$20.46
Rye	607	9	5,463	8,195	13.50
Irish Potatoes	268	82	21,976	21,976	82.00
Hay (Including Meadow)	1,972	.8	1,554	35,742	18.40
Horses and Mules*			885	89,635	
Cattle*			1,953	92,182	
Hogs*			2,942	34,421	

GRANVILLE COUNTY

In Upper Piedmont; population, 28,000; area, 321,920 acres; topography, rolling, 500 ft. elevation; waters, Tar, Neuse rivers; railroads, Southern and Seaboard; buslines, Safety Transit; highways, Nos. 21, 57, 75; telegraph and telephones; incorporated cities and towns, Creedmore, †Oxford.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	22	365	\$263,355	\$827,280	\$1,402,746	\$575,466
Lumber, Textiles, Printing and Publishing leading industries.						

Forest Products.—The forest area is approximately 190,093 acres, comprising 59 per cent of the total land area. More than 78 per cent of the forest area is farm woodland; including some 17,525 acres of woodland pasture. Little or none of the forest land outside of farms is held in large timber tracts. The principal merchantable species are pine, 70 per cent, and oak, 15 per cent.

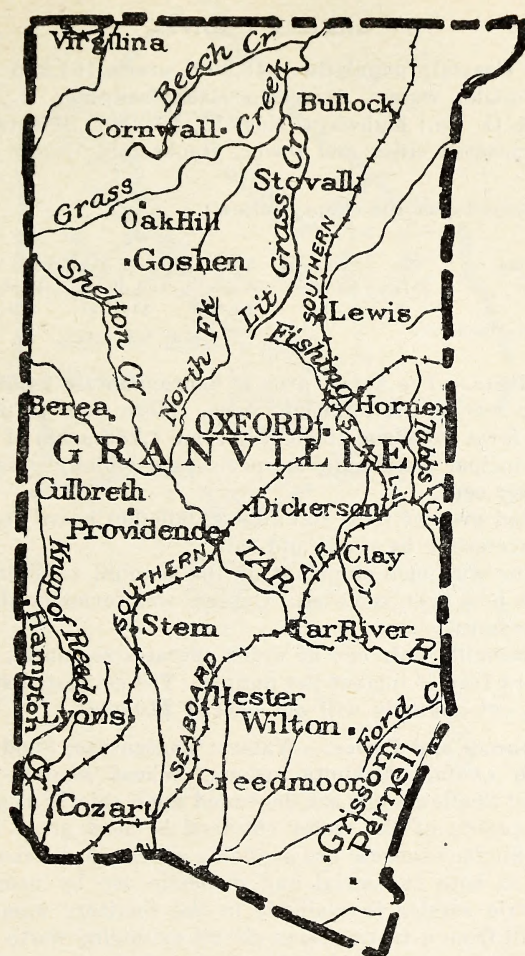
The estimated present total stand of 25,000,000 board feet of saw timber is fairly accessible by roads and rail.

About two-thirds of the forest area is second growth pine containing 75 per cent of shortleaf, 21 per cent of loblolly, and 4 per cent of spruce pine. The mixed hardwood and pine type is more abundant in the central western part.

Some 40 sawmills produce about 5,000,000 board feet of lumber per annum. A considerable quantity of ties and veneer logs are also produced. The estimated stumpage value of the timber cut annually is around \$25,000.

Water Resources and Power.—Waters: Tar and Neuse (short stretch) rivers; Knap of Reeds, Ledge, Beaverdam, Fishing, Mountain, Grass, Little Grass, Beech, and other creeks. Water: Typical of upper Piedmont section; chemical and physical quality good, but moderately high turbidities. Power: Service rendered to central section of county by transmission lines of Carolina Power, and to Southern section by the Durham Public Service Company. Ample power can be made available as needed.

Agricultural Products.—Oxford, the county seat, is an old tobacco market, selling over 20,000,000 pounds of tobacco last year, at an average of \$22.60 per hundred pounds. The soil is well suited to tobacco culture on account of its light, or loose nature. While cotton is grown in the southern portion to a limited extent, it is generally recognized as a tobacco county. 2,100 tenants live on the farms, and the acreage cultivated by owners and by tenants is fairly balanced. Last year 1,574 acres were reported in home gardens; over 6,000 hogs sold and slaughtered; 67,000 hens, 57 tractors and 14,000 tons of fertilizers used.



County Products	67,862 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	29,053	20	581,060	\$ 627,545	\$ 21.60
Tobacco	22,637	693	15,687,441	3,764,986	166.00
Cotton	5,115	255	2,729	264,778	51.77
Wheat	3,609	11	39,699	56,373	15.62
Hay (Including Meadow)	2,219	.9	2,046	40,920	18.00
Horses and Mules*			5,410	568,238	
Cattle*			4,811	227,079	
Hogs*			5,968	69,826	

GREENE COUNTY

In Central Coastal; population, 18,300, area, 161,280 acres; topography, low, fertile; waters, Moccasin river; railroads N. So.; buslines, C. & C., G. & O. Co.; highways, Nos. 12, 91, 102; telegraphs and telephones; incorporated cities and towns, Hookerton, †Snow Hill, Waltonsburg.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	3	24	\$9,680	\$14,650	\$50,540	\$35,890
All Lumber establishments.						

Forest Products.—The forest area is approximately 94,682 acres, comprising 58 per cent of the total land area. More than 43 per cent of the forest area is farm woodland; including some 1,786 acres of woodland pasture. The principal merchantable species are loblolly pine 80 per cent, and gum 15 per cent.

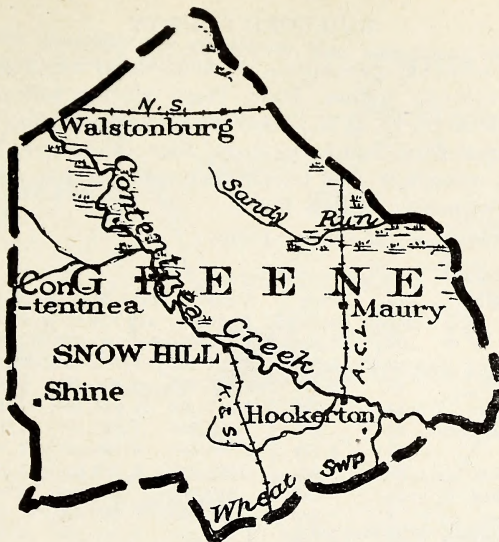
The estimated present total stand of 20,000,000 board feet of saw timber is fairly accessible by roads and rail.

Longleaf pine was once abundant on the sandhill areas in the southern part but it has now been removed. Cypress was formally abundant in the Contentnea Swamps.

Some five sawmills, only one of which operates regularly, produce about 1,500,000 board feet of lumber per annum. The estimated stumpage value of the timber cut annually will not exceed \$10,000.

Water Resources and Power.—Waters: Contentnea, Sandy Run, Middle swamp, Apple swamp, Nahunta swamp, Wheat swamp, and Rainbow creeks. Water: Shallow wells are depended upon chiefly as sources of supply, and the quality of the water obtained in most areas is regarded as satisfactory. Surface sources are available which can be rendered entirely satisfactory for both industrial and domestic use by proper treatment. Power: Electric service is available in the territory immediately south from Snow Hill from a transmission circuit extending north from Kinston.

Agricultural Products.—This is a corn, cotton and tobacco county, with the acreage fairly evenly divided and with well over 50 per cent of the land in cultivation, making it an important agricultural county. The ginning report showed 8,275 bales for the past season, which indicates, as with tobacco, that this crop is handled primarily outside of its borders. The soil here is probably more uniform than anywhere else in the state and permits of the most modern tools and methods. It used more commercial fertilizers to the acre than any other county, with an average of 519 pounds per cultivated acre. Poultry raising is relatively important and it sold and slaughtered 9,730 head of swine last year; 4,209 head of work stock were employed in 1927; 2,527 tenants worked 80 per cent of the cultivated land.



County Products	71,094 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Tobacco	23,455	730	17,122,150	\$3,938,095	\$168.00
Corn	23,373	21	490,833	461,383	19.74
Cotton	19,206	251	10,085	940,038	48.95
Cow Peas	714	12	8,568	14,994	21.00
Hay (Including Meadow)	1,879	.6	1,042	20,840	12.00
Horses and Mules*			4,356	501,020	
Cattle*			1,360	64,192	
Hogs*			11,772	137,732	

GUILFORD COUNTY

In Central Piedmont; population, 91,800; area, 442,240 acres; topography, fertile rolling; waters, Haw, Deep rivers; railroads, Southern, A. & Y., H. P. T. & D., N. & W.; buslines, Carolina, Piedmont, Greensboro-Fayetteville, Camel City, Southern, Royal Blue; highways, Nos. 10, 60, 61, 65, 70, 77, 100; telegraph and telephones; incorporated cities and towns, Gibsonville, *Greensboro, *High Point.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	200	16,554	\$14,457,664	\$46,180,891	\$79,768,862	\$33,587,971
Cotton Goods	9	5,019	3,891,103	11,763,249	20,551,887	8,788,638
Knit Goods	15	2,617	2,096,317	6,164,387	9,902,858	3,738,471
¹ Other Textile Products	13	2,773	2,317,108	11,843,499	17,015,114	5,171,615
Food and Kindred Products	29	297	370,340	1,685,801	3,315,588	1,629,787
Furniture	34	3,134	2,905,594	6,298,857	12,390,004	6,091,147
² Other Forest Products	28	962	970,330	2,903,854	5,107,499	2,203,645
Printing and Publishing	18	187	330,080	433,859	1,681,650	1,247,791
Tobacco Manufactures	8	320	214,458	369,646	819,394	449,748
³ Miscellaneous Industries	46	1,245	1,362,334	4,717,739	8,984,868	4,267,129

¹Includes, work clothing, cordage and twine, underwear, men's shorts, silk, finishing plants, etc.

²Includes, Boxes, Caskets, Veneers, Plywood, Rough lumber and Planning Mill products.

³Includes, Springs, Structural Steel, Stoves, Leather Belting, Paper Boxes, Fertilizer, Gas, Stone and Clay products, Patent Medicines, Foundry products, etc.

Forest Products.—The forest area is approximately 244,961 acres, comprising 53 per cent of the total land area. More than 51 per cent of the forest area is farm woodland; including some 29,290 acres of woodland pasture. The principal merchantable species are pine 70 per cent, oak 20 per cent, poplar, hickory and red cedar.

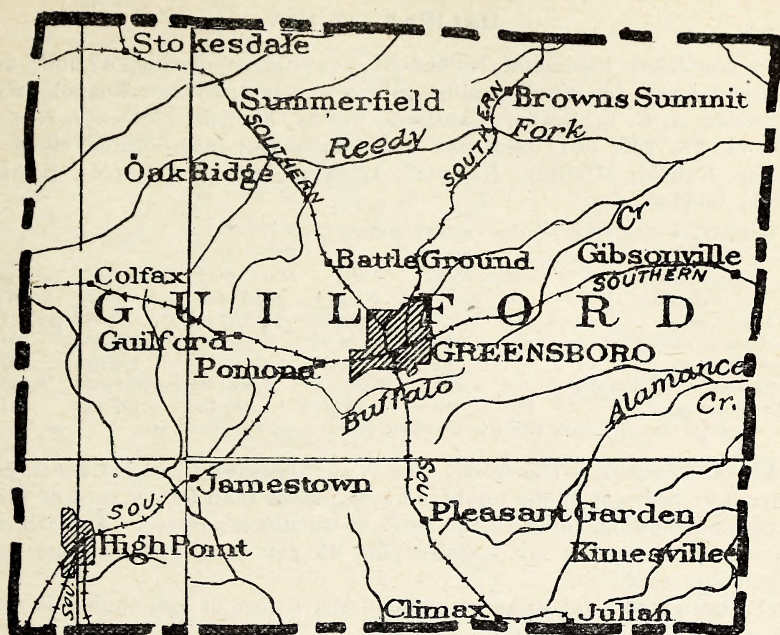
The estimate present total stand of 110,000,000 board feet of saw timber is fairly accessible by roads and rail.

In the northwestern corner barely one-third of the forest area is hardwoods, while in the southeastern part more than three-fourths is hardwoods. The remainder is practically pure pine come up on abandoned fields.

Some 30 sawmills produce about 15,000,000 board feet of lumber per annum. A quantity of ties and some veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$60,000.

Mineral Products.—Low grade copper ores which are gold bearing occur in a belt six miles southwest of Greensboro and several old gold mines are located in the southern part of the county. In the northwestern part, near Summerfield, titaniferous magnetite iron ores occur. Total value of mineral production in the county for 1926 was \$745,695.

Water Resources and Power.—Waters: Haw and Deep rivers; Reedy Fork, Horsepen, North Buffalo, South Buffalo, Polecat, and other creeks; Brandt, Buffalo, and other small lakes. Water: Streams not receiving industrial or other wastes offer water that has proved to be of satisfactory chemical and physical qualities, (although filtration is required in most instances to smooth fluctuations), for all kinds of industries. Power: Duke



Power, inter-connected with lines of North Carolina Public Service Company, make ample power available to practically all sections, with Greensboro as center, is a 10,000 h. p. auxiliary steam plant assures local power supply.

Agricultural Products.—Typical of the Piedmont practices, Guilford county has a well diversified agricultural program as will be seen from the table given below. Dairying is important here, as evidenced by the 8,460 milch cows reported last year. 1927 records show 127,976 hens of laying age, 9,913 hogs sold and slaughtered, 3,310 colonies of bees and 1,469 acres in home gardens are given. Almost 2,000 pecan trees of bearing age; 1,151 acres in melons and 1,881 acres in field vegetables, and 412 tractors in use were listed.

County Products	114,394 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	38,229	23	879,267	\$ 800,133	\$ 20.93
Wheat	20,193	13	262,509	370,138	18.33
Tobacco	15,143	686	10,388,092	2,493,144	165.00
Oats	5,254	21	110,334	86,061	16.38
Hay (Including Meadow)	13,231	1.0	13,020	292,950	22.50
Horses and Mules*			6,921	458,387	
Cattle*			11,584	546,765	
Hogs*			8,389	98,151	

HALIFAX COUNTY

In Northeast Piedmont, Northwest Coastal; population, 47,900; area, 432,640 acres; topography, hilly, rolling and low; waters, Roanoke river; railroads, A. C. L., Seaboard; buslines, Safety, Transit; highways, Nos. 12, 40, 43, 48, 125, 561; telegraph and telephones; incorporated cities and towns, Enfield, †Halifax, Hobgood, Littleton, Roanoke Rapids, Scotland Neck, Weldon.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	41	3,154	\$2,418,766	\$6,282,149	\$12,759,813	\$6,477,664
Food and Kindred Products	9	125	76,994	535,519	829,668	294,149
Forest Products	9	85	47,487	92,515	180,081	87,566
Textiles and their Products	8	2,661	2,097,589	4,363,355	9,647,620	5,284,265
*Miscellaneous	15	283	196,696	1,290,760	2,102,444	811,684

*Includes Clay and Stone products, Fertilizer, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 248,741 acres, comprising 57 per cent of the total land area. More than 51 per cent of this is farm woodland including 12,429 acres of woodland pasture. The principal merchantable species are loblolly pine 65 per cent, gums 15 per cent, oaks 8 per cent.

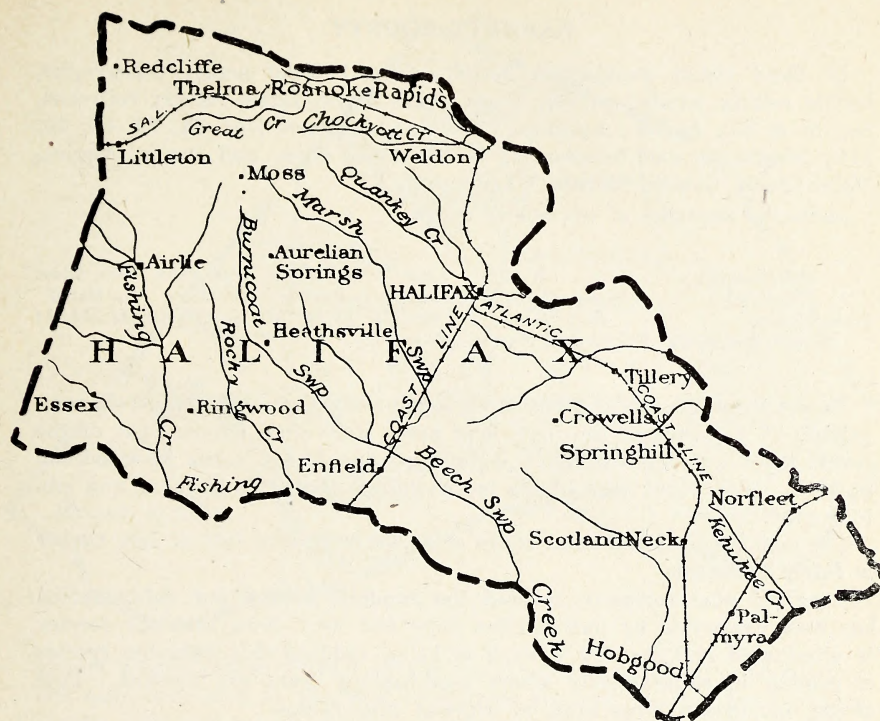
The estimated total stand of 220,000 board feet of saw timber is fairly accessible by roads and rail.

Nearly 90 per cent of the area is pine land, the remainder being hardwood bottom and swamps along Roanoke river and other streams. The steady demand for pine pulpwood at Roanoke Rapids is of great advantage to the farm woodland owner furnishing him a dependable market for his young timber.

Some 10 sawmills produce about 15,000,000 board feet of lumber per annum. Some 8,000 cords of pine pulpwood as well as veneers, ties and piling are also produced. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—Rather lean brick clays occur along the Roanoke River near Roanoke Rapids. South of the depot near Weldon are brick clays. Near Halifax extensive beds of clay occur. At Scotland Neck, in an old lake basin, brick clays are found. Brick production in the county for 1926 was \$110,631.

Water Resources and Power.—Waters: Roanoke river; Fishing, Beech swamp, Deep Burntcoat, Quankey, Chockyott, Kehukee, Marsh swamp, Bear swamp and other creeks; shallow and deep well supplies. Water: Surface supplies generally of very excellent quality; in point of number of sources, numerous. Underground supplies generally available over county but at different horizons. Wells are in general use in several sections, and water is found to be satisfactory for the most part. In a given section, the quality varies with the horizon from which water is taken. Power: Virginia Electric has a 7,800 h. p. hydro-electric plant at Roanoke Rapids on the Roanoke river; also, a 2,670 h.p. steam plant there. Scotland Neck has a 1,200 h.p. municipal steam plant. Power is made available in the county over transmission circuits of the agencies named, and from a line



(Size of map slightly reduced)

of Carolina Power which comes into the eastern side of the county to Littleton. Estimates indicate that in that stretch of the river forming the boundry line of the county with Northampton, there is 183,000 of undeveloped horsepower.

Agricultural Products.—The lands adjacent to the Roanoke river, which forms the county's eastern border, are quite fertile, due to occasional overflows and contain some fine, large farms. In the lower part of Halifax county are some of the best money-making farms in the state. It has three important cash crops namely, cotton, peanuts and tobacco, allowing rotation from one crop to another. Its truck crops are largely Irish potatoes, sweet potatoes and English peas, 77 cars being shipped in 1927. About one-third of the county is under cultivation, 1,202 acres are devoted to field truck other than potatoes, while over 2,300 acres are in home gardens. It employs 8,577 head of work stock and 137 tractors.

County Products	150,543 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	62,993	258	34,000	\$3,234,187	\$ 51.34
Corn	41,950	21	880,950	924,998	22.05
Peanuts	30,667	960	29,440,320	1,472,016	48.00
Tobacco	7,587	676	5,128,812	1,077,050	142.00
Hay (Including Meadow)	4,400	.5	2,029	46,667	11.50
Horses and Mules*			8,293	921,267	
Cattle*			4,503	212,542	
Hogs*			14,153	165,590	

HARNETT COUNTY

In Sand Hills; population, 32,400; area, 376,320 acres; topography, fertile rolling, sandy; waters, Cape Fear, Black, Little rivers; railroads, So., N. & So., At. W.; buslines, Carolina; highways, Nos. 21, 22, 53, 60, 210; telegraphs and telephones; incorporated cities and towns, Angier, Buies Creek, Coates, *Dunn, *Lillington.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	33	2,169	\$1,495,135	\$4,849,009	\$8,673,420	\$3,824,411

Textiles, Lumber and Fertilizer are the leading industries.

Forest Products.—The forest area is approximately 283,233 acres, comprising 75 per cent of the total land area. More than 37 per cent of the forest area is farm woodland; including some 11,849 acres of woodland pasture. Ninety per cent of the merchantable timber is longleaf and loblolly pine.

The estimated present total stand of 80,000,000 board feet of saw timber is fairly accessible.

Longleaf pine formerly covered the sandhill section but reforestation has been prevented by uncontrolled hogs and fire. Now that the former is eliminated and the fire hazard is being reduced this valuable species is coming in satisfactorily where seed-bearing trees are present. Fort Bragg includes a large area of longleaf pine forest.

Some 75 sawmills produce about 25,000,000 board feet of lumber per annum. Little additional material is sold. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—This county has the best gravel deposits of any county in the State. These gravels occur along the Cape Fear River and are confined chiefly to the northwestern part of the county in the vicinity of Lillington. Near Spout Springs, along the railroad, occur brick clays eight feet thick. Ten miles farther north along the same railroad, clays suitable for brick are found. Total value of mineral production in the county for 1926 was \$248,640.

Water Resources and Power.—Waters: Little, Upper Little, Lower Little, Cape Fear, and Black rivers; Mingo swamp, Barbecue swamp, Neals, Anderson, McLeod, and other creeks. Water: Abundant in point of sources of large supply available; chemical and physical characteristics, generally typical of Piedmont waters. Power: A 3,800 h. p. hydro-electric plant of the Carolina Power is at Buckhorn Falls on the Cape Fear river. This plant is linked with others of the same company, and through 66,000 volt and lower transmission lines, can furnish ample power to all parts of the county. The Cape Fear river in this county is estimated to have a total of 3,000 undeveloped horsepower.

Agricultural Products.—This county is about equally divided between the Piedmont and Coastal Plain soils. The cultivated land is found in the northern and eastern portions and around Dunn, where is located the



largest wagon cotton market in the State, cotton farming predominates. The sand hills area in the west is suitable for peaches and the northern portion produces a high quality of tobacco. The county reported 35,681 bales of cotton ginned in 1927.

County Products	92,398 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	44,408	244	22,669	\$2,102,097	\$ 47.34
Corn	29,155	22	641,410	628,582	21.56
Tobacco	8,495	715	6,073,925	1,397,003	164.00
Oats	2,263	19	42,997	32,678	14.44
Hay (Including Meadow)	1,673	.8	1,333	32,659	19.60
Horses and Mules*			7,367	851,425	
Cattle*			3,748	176,906	
Hogs*			11,470	134,199	

HAYWOOD COUNTY

In Western Mountain; population, 25,200; area, 349,440 acres; topography, fertile, mountainous; waters, Pigeon Catalooche rivers; lakes, Junaluska; railroads, So., T. & N. C.; buslines, Independent Touring; highways, Nos. 10, 209, 284; telegraph and telephones; incorporated cities and towns, Clyde, Canton, Hazelwood, [†]*Waynesville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value of Products	Value Added by Manuf.
All Industries	28	2,228	\$2,264,464	\$7,382,695	\$12,197,180	\$4,814,485

Saw Milling, Leather Tanning, Paper and Pulp, Furniture and Textiles are the leading industries in this county.

Forest Products.—The forest area is approximately 242,407 acres, comprising 70 per cent of the total land area. More than 34 per cent of the forest area is farm woodland; including some 50,000 acres of woodland pasture. Of the Forest land outside of farms some 85 per cent is held in large timber tracts. The principal merchantable species are chestnut 40 per cent, oaks 25 per cent, hemlock 5 per cent, poplar 3 per cent.

The estimated present total stand of 360,000,000 board feet of saw timber is fairly accessible by roads or rail.

The cutover spruce lands in the Northern part of the county are not reforesting themselves satisfactorily but cutover areas outside of the spruce belt are reforesting naturally and will produce valuable second growth timber now that fires are being controlled.

Some 20 sawmills produce about 30,000,000 board feet of lumber per annum. In addition to the lumber a considerable quantity of tan bark and pulpwood are produced each year. The estimated stumpage value of the timber cut annually is around \$200,000. The large pulp and paper mill at Canton creates a steady market for small and often otherwise unsalable timber.

Mineral Products.—The economic minerals of this county are kaolin clay and mica. Near the Buncombe line north of Canton low grade copper ore occurs. In the vicinity of Crabtree in the northwestern part of the county kyanite occurs. One and one-fourth miles to the north of Richland, Balsam mountain, mica is found. On the Waynesville water shed mica and feldspar are found. The Big Ridge mine four miles south of Hazelwood is an important mica mine. Near Woodrow, Hazelwood and Clyde good prospects of kaolin clay occur. The total value of mineral production in the county for 1926 was \$2,502.

Water Resources and Power.—East and West Forks and Main Pigeon and Cataloochee rivers; Richland, Allen, Brindle, Jonathon, Caldwell, Fines, Crabtree, Big, Plott's, Winchester, and other creeks; Junaluska Hepco, and Waterville (under construction) lakes. Water: Sources of supply, numerous; chemical quality, exceptionally good for all uses; physical quality, excellent. Filtration would hardly be required for any use except in the interest of sanitary protection. Power: Carolina Power has a hydro-electric plant of 93,000 h. p. at Waterville on Pigeon River nearing completion; also has lease of 1,900 h. p. plant at Hepco on the Pigeon River not now in use. Estimates give 70,800 of undeveloped horsepower on the Pigeon River in the county. Power in practically unlimited quanti-



ties is available over the county from the transmission circuits of the company named. The Southern Railroad crossing the county in a general east-west direction is very largely paralalled by a power line.

Agriculture Products.—This is probably a typical mountain county. There is a wealth of undeveloped opportunities here as its high altitude and rich soil permit the growing of all types of vegetables, fruits and grain crops. Some of the orchards and apples of Haywood county have been known for many years for their high quality. Fall Irish potatoes are grown and shipped successfully. It is well adapted to dairying.

County Products	30,488 Acreage	Yield Per Acre	Production or *Number	Value	
				Total	Per Acre
Corn	14,332	26	372,632	\$361,453	\$25.22
Wheat	5,283	9	47,547	68,468	12.96
Oats	3,071	23	70,633	47,324	15.41
Rye	2,000	11	22,000	29,920	14.96
Hay (Including Meadow)	6,204	.9	5,451	114,471	18.90
Fruit—Apple trees	155,348		272,917	302,929	
Horses and Mules*			2,748	266,212	
Cattle*			12,842	606,142	
Sheep*			6,115	71,546	

HENDERSON COUNTY

In Southern Mountain; population, 19,600; area, 229,120 acres; topography, level and mountainous; waters, Green, Mills, French Broad, Rocky Broad rivers; railroads, Southern; buslines, Brevard, Blue Nash, Red Top; highways, Nos. 20, 28, 69, 191; telegraphs and telephones; incorporated cities and towns, East Flat Rock, ‡*Hendersonville, Laurel Park.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	26	1,112	\$720,742	\$1,611,944	\$3,091,575	\$1,479,631
Clay products	4	113	75,630	53,616	156,109	102,493
Textiles and their products	5	806	455,916	1,116,684	2,028,309	911,625
*Miscellaneous Industries	17	193	189,196	441,644	907,157	465,513

*Includes Food products, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 147,932 acres, comprising 65 per cent of the total land area. Some 30 per cent of the forest area is farm woodland; including some 15,000 acres of woodland pasture. Of the forest land outside of farms only 32 per cent is held in large timber tracts. The principal merchantable species are chestnut 40 per cent, oaks 25 per cent, pine 5 per cent.

The estimated present total stand of around 80,000,000 board feet of saw timber is fairly accessible by roads and rail.

With the exception of the operations on the Pisgah National Forest in the northern part of the county, the logs from which are being manufactured in Transylvania, practically no lumber is being cut for shipment.

Henderson county however, should prove a good site for manufacturing wood products because of its good transportation facilities and its proximity to other timber producing counties.

Some 10 small portable sawmills produce little more than 1,000,000 board feet of lumber per annum, practically all of which is consumed locally. In addition to the lumber a considerable quantity of ties and pulpwood are produced each year. The estimated stumpage value of the timber cut annually does not exceed \$100,000.

Water Resources and Power.—Waters: French Broad, Green, Mills, North Fork Mills, and South Fork Mills rivers; Hungry, Clear, Reedy Patch, Mud, Bat Earle, Boylston, and other creeks. Water: Surface supplies abundant in point of both sources and flows available; chemical and physical quality, of such excellence as can only be found in pure mountain streams except in the case of a few streams running through extensive farm land which have moderately high turbidities following rains. Power: Duke Power has an 8,000 h. p. hydro-electric plant at Tuxedo on Green River, and two small hydro-electric plants totalling 395 h. p. on Hungry Creek. 33,000 volt transmission lines of the same company extend from the Tuxedo plant to the southeastern corner and north to Hendersonville, then east across the county. In the northern part Fletcher is served by a 11,000 volt line of Carolina Power from Asheville. Green River in this county is estimated to have a total of 40,000 undeveloped horsepower.



Agricultural Products.—This county shows the largest number of bearing apple trees, with the exception of one county and considering the farm area, it probably leads in this item. This is situated on the main highway from Asheville into South Carolina and Georgia and is otherwise well located. Corn occupies almost two-thirds of its cultivated area, hay ranking second. There were reported 71,000 hens of laying age, and 3,700 hogs disposed of in 1927. Its progressiveness is shown by 86 tractors being used. About one-seventh of the area is in cultivation, its agricultural valley, extending westward from Hendersonville, is attractive, as is the French Broad area towards Asheville.

County Products	34,745 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	20,471	24	491,304	\$452,000	\$22.08
Rye	3,370	11	37,070	58,200	17.27
Oats	1,109	18	19,962	14,572	13.14
Hay (Including Meadow)	5,193	1.2	6,158	147,792	28.80
Apples—Trees	151,794		176,513	428,927	
Horses and Mules*			2,114	214,830	
Cattle*			5,626	265,547	
Hogs*			2,908	34,024	

HERTFORD COUNTY

In Northern Coastal; population, 16,900; area, 218,240 acres; topography, uplands and low river lands; waters, Chowan, Meherrin, Wiccacon rivers; railroads, A. C. L., C. So.; buslines, Transit; highways, Nos. 12, 30, 48, 305; telegraph and telephones; incorporated cities and towns, Ahoskie, Harrellsville, Murfreesboro, Tunis, ‡Winton.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	10	194	\$167,980	\$175,418	\$377,948	\$202,530
Lumber leading industry in this county.						

Forest Products.—The forest area is approximately 157,692 acres, comprising 72 per cent of the total land area. More than 54 per cent of this is farm woodland including 20,612 acres of woodland pasture. The principal merchantable species are loblolly pine 75 per cent, gums 12 per cent, oak 6 per cent.

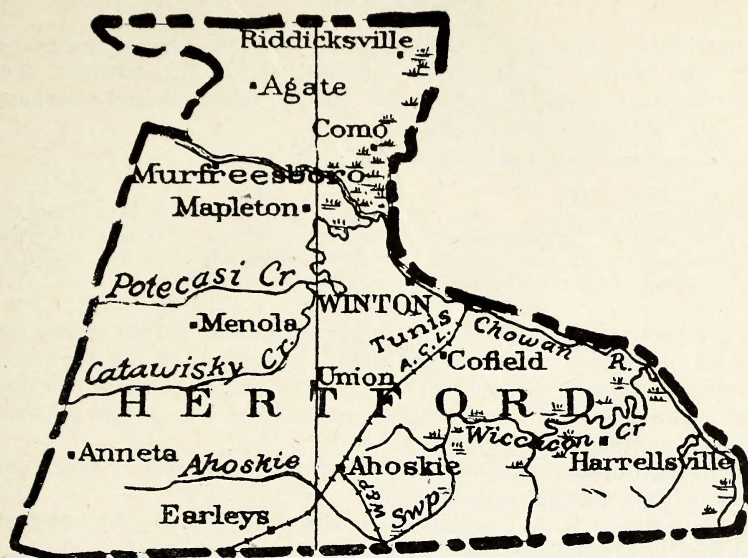
The estimated present total stand of 390,000,000 board feet of saw timber is fairly accessible over roads, water and rail.

In the northeastern part one company is holding a large area of mature timber. Elsewhere the forests have been more or less cut over within twenty years and the second growth though thrifty and abundant is comparatively small.

Some 25 sawmills produce about 4,000,000 board feet of lumber per annum. A considerable quantity of piling, staves and veneer logs are produced. The estimated stumpage value of the timber cut annually is around \$40,000.

Water Resources and Power.—Waters: Chowan, Meherrin, and Wiccacon rivers; Cattawisky, Potecasi, Buckhorn, Chinkapin, Ahoskie swamp, and other creeks; underground supplies from shallow and medium depth wells. Water: Surface waters have characteristics similar to general section of state, which is low lying and partly in swamps. Chemical quality considered fair with high acidity. Color, high. Old assays of a few springs indicate soft water. Power: Available from two transmission circuits of the Virginia Electric; one in the northern section; the other in the central southeast section, parallel to the Atlantic Coast Line railroad.

Agricultural Products.—About 40 per cent of the cultivated land in this county is devoted to peanuts although there is a good distribution between corn, tobacco, cotton and hay. That peanuts are conducive to swine production, is again indicated by this county disposing of 23,927 head last year, the most hogs, in proportion to area, in the State. About one-half of the county is in cultivation and a large proportion is worked by tenants. A record of 235 bushels of corn per acre was reported from this district. The soil is a fine, sandy loam, which is capable of high fertility and crop production.



County Products	63,620	Yield	Production or *Number	Value	Value
	Acreage	Per Acre		Total	Per Acre
Peanuts	25,018	997	24,942,646	\$1,247,147	\$ 49.85
Corn	16,524	23	380,052	380,052	23.00
Cotton	14,557	290	8,832	827,420	56.84
Tobacco	3,027	740	2,239,980	470,396	155.00
Hay (Including Meadow)	8,116	.2	1,942	42,724	4.40
Horses and Mules*			3,820	417,300	
Cattle*			1,661	78,399	
Hogs*			14,180	165,906	

HOKE COUNTY

In Sandhills; population, 11,722; area, 266,880 acres; topography, rolling, low; waters, Little river; railroads, A. & R.; buslines, Swan Quarter-Belhaven B. L.; highways, Nos. 24, 70; telegraph and telephones; incorporated cities and towns, Raeford.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	9	471	\$126,709	\$622,712	\$881,828	\$259,116

Lumber, Cotton Seed products and Textiles most important industries.

Forest Products.—The forest area is approximately 166,574 acres, comprising 62 per cent of the total land area. More than 23 per cent of the forest area is farm woodland; including some 6,788 acres of woodland pasture. The principal merchantable species are longleaf and loblolly pine 90 per cent and gum 5 per cent.

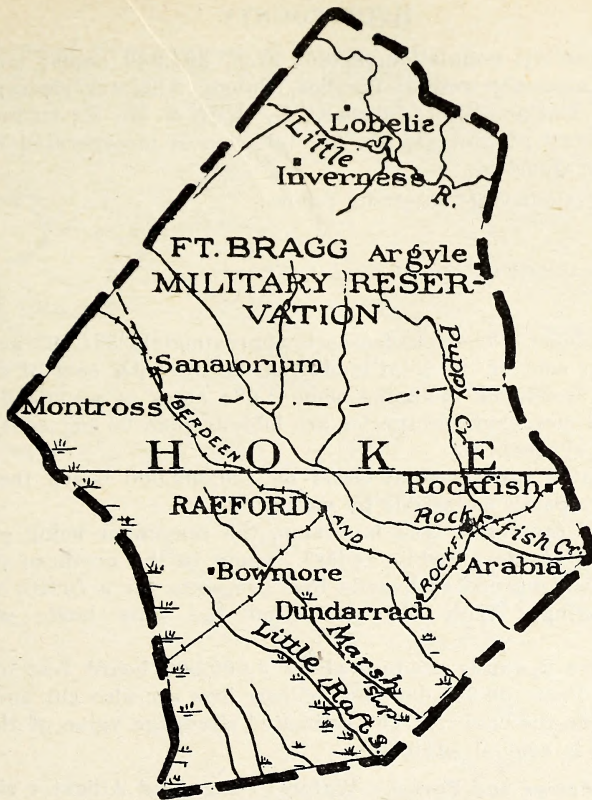
The estimated present total stand of 30,000,000 board feet of saw timber is accessible over medium to good roads.

The northern part is the sandhill phase of soil and topography, originally covered with longleaf pines. Now that hogs are controlled this is gradually coming back after lumbering, where seed trees remain. Fort Bragg extends into this region.

Some 12 sawmills produce about 5,000,000 board feet of lumber per annum. A few junipers (white cedar) poles are also cut. The estimated stumpage value of the timber cut annually is around \$20,000.

Water Resources and Power.—Waters: Little river; Crane, James, Rockfish, Puppy, Raft swamp, Little Raft swamp, Quewhiffle, and other creeks. Water: Typical of waters of the southeast Piedmont region; satisfactory as a rule in both chemical and physical aspects, but both color and turbidity will be found sufficiently objectionable in some waters as to require filtration. Power: Electric power is available in this county through the transmission lines of Carolina Power. A 13,000 volt line enters the northwestern part and runs to Lobelia, then east across the county. Another 13,000 volt line extends south from Lobelia to Raeford and Sanatorium. A 100,000 volt line crosses the county just inside its southeastern boundary.

Agricultural Products.—The farm area lies mostly in the southern section of the county where intensive and progressive agriculture is practiced. With 57 per cent of the cultivated land in cotton it ranks as the second most intensive cotton county in the State. The season's ginnings showed 13,527 bales for this county. Tobacco is gaining a rapid foothold. Truck farming is confined to the southern portion. Commercial peach orchards are found in the southwest, 116,275 peach trees of bearing age reported. Watermelons and cantaloupes shipped total of 64 cars in 1927. Almost three-fourths of the cultivated area is worked by tenants. The Fort Bragg artillery reservation takes much of the northern portion of the county.



County Products	69,103 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	39,234	236	19,371	\$1,796,289	\$45.78
Corn	18,347	22	403,634	379,416	20.68
Tobacco	2,871	748	2,147,508	472,452	165.00
Oats	2,817	22	61,974	50,819	18.40
Hay (Including Meadow)	5,529	1.1	6,133	141,059	25.30
Horses and Mules*					
Cattle*					
Hogs*					

HYDE COUNTY

In East Coastal; population, 8,386; area, 394,880 acres; topography, county low, swamps; waters: Pamlico, Pungo, Alligator rivers; Pamlico sound; lakes, Mattamuskeet; railroads, N. H. H. & Mt. V.; buslines, Swan Quarter-Belhaven; highways, No. 91; telephones; incorporated cities and towns, ‡Swan Quarter.

Industrial statistics of the county follow:

No manufacturing establishments reporting from Hyde County.

Forest Products.—The forest area is approximately 351,935 acres, comprising 90 per cent of the total land area. Only 7 per cent of the forest area is farm woodland, including some 2,684 acres of woodland pasture. The principal merchantable species are loblolly pine 65 per cent, gum 25 per cent and cypress.

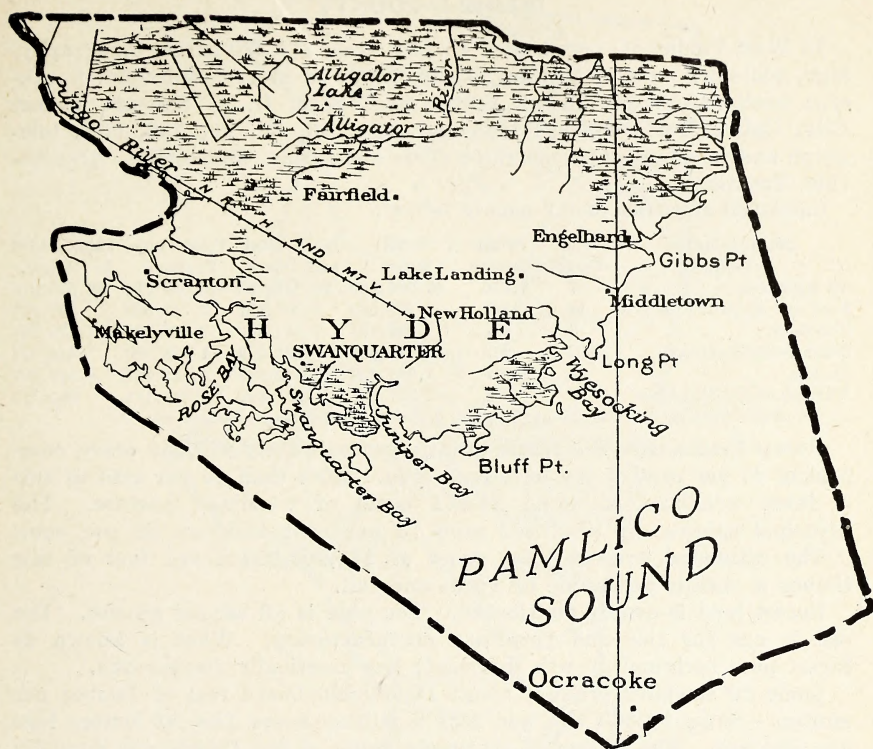
The estimated present total stand of 130,000,000 board feet of saw timber is only partly accessible by water.

Nearly half the forest land is swamp, the remainder being pine type. Large areas of juniper (white cedar) swamp in the northern part have been logged and burned so heavily that prospects for a future stand are not encouraging. With fire protection the pine lands will yield abundantly.

Some twelve sawmills produce about 4,000,000 board feet of lumber per annum. Some 30,000,000 feet of saw logs are also cut and shipped to mills outside the county. The estimated stumpage value of the timber cut annually is around \$150,000.

Water Resources and Power.—Waters: Pungo and Alligator rivers; Alligator, Pungo (part), and Mattamuskeet lakes, Pamlico sound; Atlantic ocean. Water: Surface sources of supply are peculiar to the region and are considered potable in rare instances only, but are susceptible of being made so with special treatment. Water from shallow wells can be had generally but is not satisfactory. Cistern water is used almost entirely for domestic supply, while deep wells are in use in the more thickly settled sections. Power: Available where developed privately by combustion engines.

Agricultural Products.—This unique county, while it was still isolated from outside contact, except by water, had a larger proportion of college graduates than perhaps any other county in North Carolina and its farming was of a very high type and profit. This county practically fed itself, while selling large quantities of corn and soy beans. Mattamuskeet lake is found here whose development by drainage was undertaken several years ago at a large expense. About 10 per cent of the county is in cultivation, which district lies close around the lake, except on the east where it extends to the Pamlico sound. This is the natural home of the soy bean, where probably more are grown than in any other county in the United States. The soil is very fertile.



(Map reduced to two-thirds size)

County Products	39,023 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	18,858	28	528,024	\$396,018	\$21.00
Soy Beans	11,068	14	154,952	193,690	17.50
Cotton	3,777	263	2,078	198,670	52.60
Oats	1,665	30	49,950	32,468	19.50
Hay (Including Meadow)	1,213	.4	443	10,189	9.20
Horses and Mules*			2,351	230,553	
Cattle*			2,227	105,114	
Hogs*			9,164	107,219	

IREDELL COUNTY

In West Piedmont; population, 40,400; area, 376,320 acres; topography, high, plateau; waters: Yadkin, Rocky, Catawba rivers; railroads: Southern; buslines, Statesville-Sal. Statesville-Tayl'v'e, G. A. Shugart, Camel City, Call Motor company; highways, Nos. 10, 26, 90, 150, 901; telegraph and telephones; incorporated cities and towns, Mooresville, *‡Statesville, Troutman.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added By Manuf.
All Industries	67	3,816	\$3,035,360	\$9,334,038	\$15,839,054	\$6,505,016
Food and Kindred Products	14	121	109,590	3,201,132	3,703,599	502,467
Furniture	8	687	647,721	1,351,444	2,627,431	1,275,987
Other Forest Products	15	267	244,929	591,602	1,305,246	713,644
Textiles	13	2,447	1,696,829	3,392,460	6,441,667	3,049,207
*Miscellaneous Industries	17	294	336,291	797,400	1,761,111	963,711

*Includes Printing and Publishing, Tobacco products, Cotton Seed products, etc.

Forest Products.—The forest area is approximately 179,488 acres, comprising 47 per cent of the total land area. More than 66 per cent of this is farm woodland including 24,561 acres of woodland pasture. The principal species are shortleaf pine 75 per cent and oak 20 per cent.

The estimated present total stand of 135,000,000 board feet of saw timber is readily accessible by roads and rail.

Forest land is evenly distributed. The pine is all second growth. The oak is cut for ties and furniture manufacturing. What is known as forest pine (original growth shortleaf) has practically disappeared.

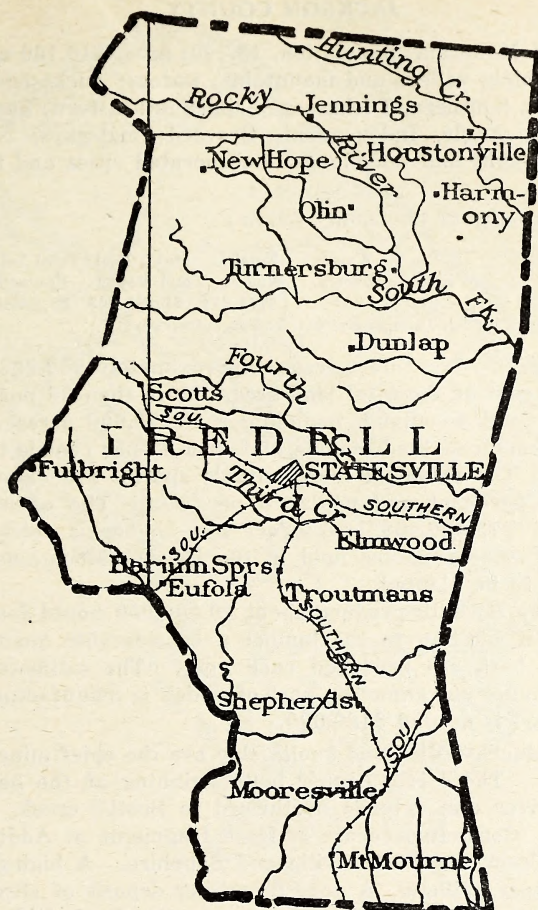
Some 30 sawmills produce about 16,000,000 board feet of lumber per annum. Some 85,000 ties and half a million board feet of veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—Kyanite occurs as large crystals in the rock in the vicinity of Statesville. One mile south of Statesville, in the railroad bank, a deposit of kaolin 130 feet wide is exposed. Clays suitable for brick manufacture are found near Statesville in several localities. The chief granite deposits of this county occur in its southern part near Mooresville, where several quarries have been operated in the past. A porphyritic granite area occurs north of Mooresville in a belt five miles wide. A biotite granite is exposed at a number of places four miles to the southeast of Statesville. Granitic gneiss also occurs in this vicinity.

Mineral production in the county for 1926 amounted to \$233,000.

Water Resources and Power.—Waters: Catawba, Rocky, and South Yadkin rivers; Hunting, Third, Fourth, Snow, and other creeks; small fringe of Lookout Shoals lake. Water: Numerous streams of large flow offer large number of sources of supply; chemical quality, excellent; physical qualities, good but with moderately high turbidities. Power: Duke Power has 33,000 horsepower hydro-electric development partly in Catawba County at Lookout Shoals. High and low voltatge circuits radiate from Statesville to make ample power immediately available to greater part of county. Rural power lines are in use to some extent.

Agricultural Products.—Of the true Piedmont counties, Iredell has the largest cultivated acreage. Cotton is grown intensively in the southern



portion while wheat is quite an important crop. It is a natural location for diversified farming, it being adapted for livestock, cotton, tobacco, small grains and feed crops, as well as fruit. With over 2,000 tenants living on farms, yet more land is worked by the owners than by these tenants. Last year almost 7,000 hogs were disposed of, 96,000 hens, over 6,000 milch cows and 272 farm tractors being used. For this part of the state, a large fertilizer consumption was reported, mostly under cotton. It is one of the oldest dairy counties in the State and is pushing development along this line.

County Products	131,012 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	39,363	21	826,623	\$669,565	\$17.01
Cotton	38,442	238	19,141	1,829,839	47.60
Wheat	22,874	10	228,740	340,823	14.90
Oats	6,166	18	110,988	75,472	12.24
Hay (Including Meadow)	9,872	.9	9,148	210,404	20.70
Horses and Mules*			6,514	708,446	
Cattle*			8,401	396,527	
Hogs*			7,623	89,189	

JACKSON COUNTY

In Southwest Mountain; population, 13,700; area, 316,160 acres; topography: fertile, high, valleys and mountains; waters: Tuckasegee, Chattooga rivers; railroads, Southern, Tuckaseegee and Southeastern; buslines, Tuckaseegee, T. W. Angle, Independent, Brevard; highways, Nos. 10, 28, 106, 285; telegraphs and telephones; incorporated cities and towns, Dillsboro, §Sylva.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	21	991	\$771,171	\$1,885,563	\$3,258,191	\$1,372,628

Lumber, Leather Tanning, Tanning Extract, leading industries.

Forest Products.—The forest area is approximately 252,227 acres, comprising 80 per cent of the total land area. More than 36 per cent of the forest area is farm woodland, including some 25,000 acres of woodland pasture. Of the forest land outside of farms 55 per cent is held in large timber tracts. The principal merchantable species are chestnut 35 per cent, oaks 35 per cent and poplar 5 per cent. The estimate present total stands of 375,000,000 board feet saw timber is fairly accessible. There is some cutover spruce land in the Balsam Mountains which will probably need to be planted.

Ten or twelve sawmills produce about 20,000,000 board feet of lumber per annum. In addition to the lumber a considerable quantity of ties, pulpwood and bark are produced each year. The estimated stumpage value of the timber cut annually, part of which is manufactured in Transylvania County, is around \$180,000.

Mineral Products.—Mica and kaolin clay are the chief mineral products of this county. There is a copper belt beginning at the headwaters of Tuckaseegee river and extends northward to Scott's creek. The ore is chalcopyrite. Corundum occurs as loose fragments at Addie, on Caney Fork, John's Creek, near Glennville and Sapphire. A high-grade garnet schist occurs near Willets. A very promising deposit of chromite occurs near Webster, another deposit occurs near the Dark Ridge trestle on the Murphy branch of the Southern Railway. Along the Tuckaseegee river and Scott's creek several commercial deposits of kaolin occur. Mica occurs at several places along Wayehutta creek, on Sugarloaf mountain, on Wesner Bald near Cabin creek, one mile east of Deep Gap of Black mountain, on Tennessee ridge along Moses creek, near mouth of Caney Fork creek, along west side of Wolf creek and near Panther Knob. There are several other localities which show good prospects.

Water Resources and Power.—Waters: Tuckaseegee, West Fork Tuckaseegee, and Chattooga (headwaters) rivers; Scott, Saco, Savannah, Dick, Callowhee, Caney Fork, Wolf, Horsepasture, and other creeks; Fairfield, Sapphire, and other lakes. Water: Bold mountain streams generously available over county, chemical and physical qualities, very superior except in the case of one or two streams receiving small amounts of industrial wastes. Power: A 320 h. p. hydro-electric plant of the Dillsboro and Sylva Electric Light Company on the Tuckaseegee river in this county is estimated to have a total of 5,000 undeveloped horsepower.



Agricultural Products.—Only a small part of Jackson County is in cultivation, half of which is in corn and 31 per cent in hay crops. Fruits and field vegetables show good diversification. Many cars of late crop, Irish potatoes and cabbage are shipped. Native grasses grow abundantly for grazing and hay purposes. It reports 3,426 colonies of bees, 6,875 hogs sold and slaughtered, 49,000 hens, 2,682 ewe sheep. Very little commercial fertilizers are used in this county.

County Products	26,508 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	13,365	25	334,125	\$300,713	\$22.50
Wheat	2,756	7	19,292	29,903	10.85
Oats	1,489	12	17,868	13,044	8.76
Rye	968	12	11,616	15,682	16.20
Hay (Including Meadow)	4,790	.9	4,125	82,500	18.00
Horses and Mules*			1,948	193,860	
Cattle*			6,284	296,605	
Hogs*			6,215	72,716	

JOHNSTON COUNTY

In East Piedmont, West Coastal, Sandhills; population, 54,100; area 516,480 acres; topography, fertile, hilly, rolling, level uplands; waters: Neuse, Little rivers; railroads: Southern, A. C. L.; buslines, Carolina, Safety; highways, Nos. 10, 22, 91, 220; incorporated cities and towns, Benson, Clayton, Four Oaks, Kenly, Micro, Pine Level, Princeton, *Smithfield, Selma.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	31	1,021	\$639,744	\$2,756,200	\$4,200,628	\$1,444,428
Forest Products	9	110	60,010	147,412	275,608	128,196
Textiles and their products	5	755	441,759	1,497,957	2,331,719	833,762
*Miscellaneous Industries	17	156	137,975	1,110,831	1,593,301	482,470

*Includes Cotton Seed products, Clay products, Fertilizer, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 328,665 acres, comprising 64 per cent of the total land area. More than 57 per cent of the forest area is farm woodland, including some 51,135 acres of woodland pasture. The principal merchantable species are loblolly pine 80 per cent, gum 10 per cent, oak and hickory.

The estimated present total stand of 130,000,000 board feet of saw timber is fairly accessible.

On the edge of the Coastal Plan, most of the upland originally supported a longleaf pine forest. Little of this is now left. One-third is now hardwood, generally mixed with pine and two-thirds is pine forest, almost entirely loblolly. Most is heavily cut over.

Some 40 sawmills produce about 12,000,000 board feet of lumber per annum. A considerable quantity of ties and veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—Near Selma, Four Oaks, and just to the west of Smithfield brick clays occur. The clays are the sedimentary clays which are rather sandy or lean. Just north of Clayton a low grade sedimentary iron ore occurs. Gneissic granite outcrops at several localities in the northwestern part of the county. Value of the mineral production for 1926 was \$90,661.

Water Resources and Power.—Waters: Neuse and Little rivers; Buffalo, Little Buffalo, Swift, Middle, Black, Hannah, Stone, and other creeks. Water: Abundant in point of large streams available as sources of supply, chemical and physical, qualities generally good but sanitary protection and filtration possibly necessary in some instances. Power: Service is made available from the high tension transmission system of the Carolina Power with lines parallel to almost the entire railroad system of the county.

Agricultural Products.—Considered from every angle, this county is classed as a leader in agriculture in North Carolina. Most of its land is slightly rolling, with good drainage, underlaid with a good clay sub-soil, its fertility is easily maintained. Progressive farming methods are practiced and high yields result. This is the state's leading cotton county,



with 51,249 bales ginned in 1927 besides over 14,000,000 pounds of tobacco produced. A considerable acreage of spring oats is usually grown to aid in the feed problem as, with the exception of corn, it is sometimes short in hay and grain crops. Its 25,582 head of hogs disposed of in 1927 gives it second rank in this item in the state. Over 200 tractors and 3,382 tenants operated on the farms and 106,692 hens were reported.

County Products	186,740 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	87,567	258	47,266	\$4,495,865	\$51.34
Corn	60,712	22	1,335,664	1,255,524	18.71
Tobacco	20,111	721	14,500,013	3,190,007	159.00
Oats	6,613	18	119,034	82,133	12.42
Hay (Including Meadow)	2,867	1.0	2,828	65,977	23.33
Horses and Mules*			15,378	1,794,974	
Cattle*			5,784	273,005	
Hogs*			31,346	366,748	

JONES COUNTY

In Coastal; population, 10,700; area, 266,880 acres; topography, fertile, low, swamps; waters, Trent, Whiteoak rivers; lakes, Catfish; railroads, N. So., A. C. L.; buslines, Seashore; highways, Nos. 12, 30, 41; incorporated cities and towns, Maysville, Pollocksville, ‡Trenton.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	4	78	\$52,897	\$111,176	\$241,264	\$130,088

Chief industries are Lumber and Cotton Seed products.

Forest Product.—The forest area is approximately 200,439 acres, comprising 78 per cent of the total land area. More than 25 per cent of the forest area is farm woodland; including some 5,640 acres of woodland pasture. The principal merchantable species are loblolly pine, 80 per cent, gum, 10 per cent, longleaf pine, poplar, ash and cypress.

The estimated present stand of 60,000,000 board feet of saw timber is partly accessible by roads and rail.

More than 50 per cent of the forest is swamp land, much of it classed as pocosin pine. The rest is loblolly pine lands pretty thoroughly cut over. Longleaf pine is now returning in the second growth.

Some 5 small sawmills produce about 600,000 board feet of lumber per annum. An additional 20,000,000 feet of saw logs are cut and shipped by water to New Bern. Staves and veneer logs are also produced. Nearly all the staves are made of pine. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—Marl and shell rock outcrop in beds 8 to 30 feet thick along Trent River for a distance of 10 miles or more. The analysis show from 90 per cent to 95 per cent calcium carbonate content. It is probable that these marls and shell rock will be used for the manufacture of Portland cement in the future. A great many deposits in this county have been worked for land lime. The clays are rather sandy over the entire county.

Water Resources and Power.—Waters: Whiteoak and Trent rivers; Beaver, Tuckahoe, Hunters and other creeks; Catfish and other small lakes; underground sources. Water: Supplies from surface sources, typical of extreme eastern waters, are available generally and can be used satisfactorily with proper filtration. Springs and shallow wells for all except the largest supplies, which have to go deeper. Variation is found in the quality of the water from these sources, which are satisfactory for most purposes. Power: Electric service in central and eastern section of the county by transmission circuits of the Carolina Gas and Electric Company. Other areas within comparatively easy reach of lines.

Agricultural Products.—With a varied type of soil, much of this county is capable of good production and with the recent highway program has opened it up to greater development. About 18 per cent of the area is in cultivation, the remainder is largely cut-over land of a sandy nature. A fair diversification in its cropping program is shown, although somewhat



short on feed crops. In 1927, 15,792 head of hogs were sold with only 789 milch cows reported. It is essentially a rural community and is naturally suited to truck crops.

County Products	46,940 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acr
Corn	21,795	20	435,900	\$392,310	\$18.00
Tobacco	9,755	700	6,828,500	1,433,985	147.00
Cotton	6,928	205	2,971	278,367	40.18
Soy Beans	2,209	16	35,344	49,482	22.40
Hay (Including Meadow)	4,344	.5	2,282	50,204	11.00
Horses and Mules*			1,988	223,164	
Cattle*			1,184	55,885	
Hogs*			11,931	139,593	

LEE COUNTY

In East Piedmont, Sandhills; population, 14,800; area, 167,040 acres; topography, north rolling, south sandhills; waters, Deep, Little rivers; railroads, Seaboard, Southern, A. & W.; buslines, Piedmont, Greensboro-Fayetteville, Safety; highways, Nos. 50, 53, 60, 75; incorporated cities and towns, *Jonesboro, *†Sanford.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf
All Industries	28	625	\$483,995	\$1,361,807	\$2,402,907	\$1,041,100
Clay Products	5	172	130,227	187,661	402,433	214,772
Food and Kindred Products	6	20	20,790	219,724	301,594	81,870
Forest Products	9	201	147,367	340,584	646,614	306,030
*Miscellaneous Industries	8	232	185,611	613,838	1,052,266	438,428

*Includes Cotton Seed products, Fertilizer, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 125,624 acres, comprising 75 per cent of the total land area. More than 58 per cent of the forest area is farm woodland; including some 10,303 acres of woodland pasture. The principal merchantable species are loblolly, longleaf and shortleaf pine, 90 per cent, and oak, 5 per cent.

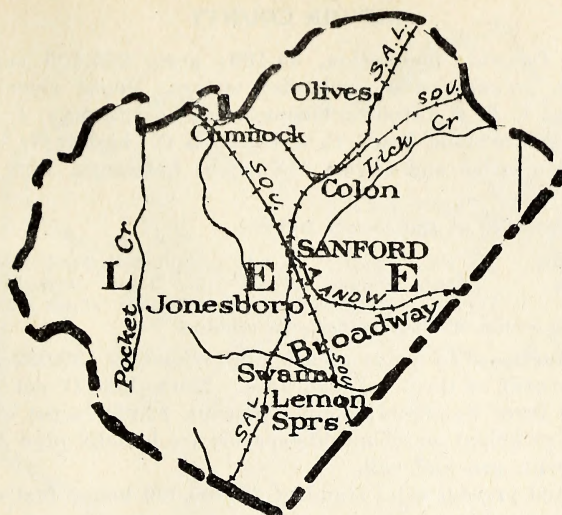
The estimated present total stand of 10,000,000 board feet of saw timber is assessable by roads and rail.

Demand and accessibility are largely responsible for the closely cut-over condition of the forest. Forest fire protection, recently inaugurated, should encourage natural reforestation in both sandhill and clay areas.

Some 30 small sawmills have been producing about 10,000,000 board feet of lumber per annum. Ties, veneer logs and pulpwood have also been cut. The estimated stumpage value of the timber cut annually is around \$40,000.

Mineral Products.—The entire western half of the county contains shales and clays suitable for brick and tile. The best clays are found near Colon where two plants are in operation. The northwestern part of the county near Cumnock is underlaid with two very good seams of bituminous coal. The shales, clays and coals are in the Triassic formations. In the vicinity of Sanford, a red sandstone occurs which has been quarried for many years. Cutting the sandstone are basic dikes which furnish stone for building and road construction. Total value of the mineral production in the county for 1926 was \$330,443.

Water Resources and Power.—Waters: Deep and Upper Little rivers; Pocket, Lick, Governors, Patterson, and other creeks. Water: Sources of large supply, numerous; chemical and physical characteristics, generally excellent on local streams with physical qualities less attractive for the larger sources on account moderately high turbidities. Power: Carolina Power has two 1,350 h. p. hydro-electric plants on the Deep river at Caribonton and Lockville (partly in Chatham county). Transmission lines: 66,000 volt from Lockville southeast and then northeast to Buckhorn Falls plant; double circuit 100,000 volt line Cape Fear steam plant to Sanford, double circuit west and southwest. This system can furnish power throughout the county. Undeveloped site on Deep river estimated 2,530 h.p.



Agricultural Products.—Cotton, tobacco and dewberries are important crops in this county. The western portion has a stiff clay soil, while the eastern part is inclined most to gravel and sandy types. About two-thirds of the land is worked by owners. As evidenced by the 7,676 tons of fertilizers used last year, the soil is not considered naturally fertile. This is the northern border of the Peach Belt of the Sand Hills.

County Products	34,664 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	12,718	19	241,642	\$234,393	\$18.43
Cotton	12,605	228	6,012	557,544	42.23
Tobacco	2,810	700	1,960,700	450,961	161.00
Oats	2,152	21	45,192	35,250	16.38
Wheat	1,958	11	21,538	31,661	16.17
Horses and Mules*			2,272	258,560	
Cattle*			2,473	116,726	
Hogs*			2,776	32,479	

LENOIR COUNTY

In Central Coastal; population, 34,100; area, 249,600 acres; topography, fertile, swamps and lowlands; waters, Neuse river; railroads, A. C. L., N. So., K.-C. & Carolina; buslines, Seashore, Safety, J. E. Mitchell. Allen Moses, Southerland Bros., C. & C., G. & O.; highways, Nos. 10, 11, 12; incorporated cities and towns, *Kinston, LaGrange, Pink Hill, Deep Run.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added By Manuf.
All Industries	29	619	\$394,371	\$1,596,420	\$2,463,252	\$866,832

Textiles, Forest products and Food products chief industries.

Forest Products.—The forest area is approximately 139,097 acres, comprising 55 per cent of the total land area. More than 41 per cent of the forest area is farm woodland; including some 12,258 acres of woodland pasture. The principal merchantable species are loblolly pine 80 per cent, gum 15 per cent, ash and oak.

The estimated present total stand of 30,000,000 board feet of saw timber is fairly accessible.

Probably not more than 20 per cent of the forest land is swamp. The pine forest has been pretty closely cut over, though there are still some good patches of timber, mostly on farms. Pine second growth is now being protected from fire.

Some 10 sawmills produce about 12,000,000 board feet of lumber per annum, only 20 per cent of which was logged within the county. Some ties and veneer logs are also produced. The estimated stumpage value of the timber cut annually hardly exceeds \$15,000.

Mineral Products.—Sandy clay suitable for common brick making occurs along the Neuse river near Kinston. Along the south bank of the Neuse river, a belt of country eight to ten miles in width extending to Wayne county line is underlaid by marls and shell rock, showing 70 per cent to 80 per cent calcium carbonate. Along Mill Branch, four miles south of Kinston, marl has been dug which averaged 80 per cent calcium carbonate. Mineral production in the county for 1926 was \$10,000.

Water Resources and Power.—Waters: Neuse, river; Wheat Swamp, Bear, Southwest, Contentnea, Briery Run, and other creeks; underground supplies from shallow and deep wells. Water: Generally available from both surface and underground sources. Surface waters generally satisfactory for domestic and industrial use after filtration as to chemical and physical characteristics. Deep wells at Kinston and other places yield soft waters comparing favorably with first class surface waters. Power: Kinston 3,000 h.p. municipally owned steam plant. Independent companies purchase and transmit over 13,000 volt lines north to Snow Hill; northeast to Grifton; southwest to Deep Run, and Pink Hill. Carolina Power furnishes power to LaGrange over 22,000 volt transmission line from Goldsboro.

Agricultural Products.—The River Neuse divides the county into two sections. The northern section is mainly in large farms operated by tenant labor and the southern section, small farms owned and operated by family



labor. This county, while a "cash crop" county of cotton and tobacco, is now following a greater diversified farming program each year. Being of a light, sandy nature, the soil is suitable for almost any crop. Tenants produce about 72 per cent of the crops and while the number of tractors is relatively small, the employment of 24,752 tons of commercial fertilizers last year shows the absence of livestock and other forms of soil improvement. The interplanting of corn, with soy beans and cow peas, is common here.

County Products	87,895 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	38,997	23	896,931	\$ 834,146	\$ 21.39
Tobacco	23,377	850	19,870,450	4,172,794	178.00
Cotton	20,942	217	9,507	877,072	41.88
Oats	1,426	15	21,390	17,112	12.00
Hay (Including Meadow)	4,018	.8	3,037	68,332	18.00
Horses and Mules*			4,590	515,042	
Cattle*			2,048	96,666	
Hogs*			16,471	192,711	

LINCOLN COUNTY

In West Piedmont; population, 18,400; area, 191,360 acres; topography, hilly, high; waters, Catawba river; railroads, Seaboard, G. & N.; buslines, B. & H., Intercarolinas Motor Bus Co.; highways, Nos. 16, 18, 27, 206; incorporated cities and towns, Crouse, Denver, †Lincolnton.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	32	1,794	\$1,225,327	\$3,367,776	\$5,425,726	\$2,057,950
Food and Kindred Products	9	24	24,658	226,100	329,181	103,081
Textiles and their products	15	1,613	1,074,389	2,989,146	4,723,552	1,734,406
*Miscellaneous Industries	8	157	126,280	152,530	372,993	220,463

*Includes Printing and Publishing, Lumber and Planning Mill products, etc.

Forest Products.—The forest area is approximately 93,847 acres, comprising 49 per cent of the total land area. More than 62 per cent of the forest area is farm woodland; including some 12,415 acres of woodland pasture. The principal merchantable species are shortleaf and spruce pine, 80 per cent, oak 18 per cent.

The estimated present total stand of 42,000,000 board feet of saw timber is fairly accessible.

North and northwest of Lincolnton, on the heavy red clay soils, no pine occurred in the original forest. This area, locally known as "The Oaks," together with other areas of hardwood forests, make up about one-third of the total area.

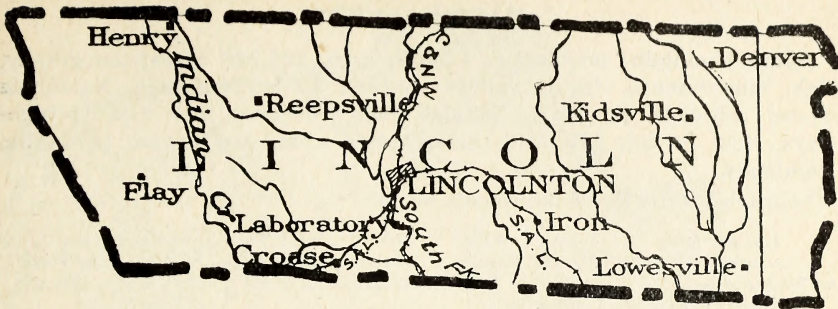
Some 12 sawmills produce about 4,000,000 board feet of lumber per annum. A considerable quantity of ties are also cut. The estimated stumpage value of the timber cut annually is around \$20,000.

Mineral Products.—A belt of slates carrying varying amounts of manganese crosses the county in the eastern part. A dolomitic limestone occurs four miles to the east and southeast of Lincolnton. This limestone was mined to be used as a flux when iron ore was mined in that section. Some prospecting work was carried on near Lincolnton during the early part of 1928 to determine the value of the tin ore in that vicinity. The clay along the Clarke River, northwest and north of Lincolnton, supplies a great many potters in that section of the state.

Total value of the mineral production in the county in 1926 was \$75.00

Water Resources and Power.—Waters: Catawba and South Fork Catawba rivers; Indian, Howards, Clark, Leepers, Anderson, Killina, Seigle, and other creeks. Water: Sources, numerous; chemical quality, considered good; physical quality, good but for moderately high turbidities prevailing. Power: Service is available from Duke Power 44,000-volt circuit crossing the county in a north-south direction via Lincolnton generally parallel to the Carolina and Northwestern railroad. Service can be extended where and when justifiable. Rural power lines are developed to some extent.

Agricultural Products.—This county is rolling with cecil-clay soil. While cotton predominates, wheat is quite an important crop. More than 50 per cent of the county area is in cultivation, with some of the most picturesque farm country in the state. Lincoln is a relatively small county, but it had



238 active tractors in 1927. While well up in the Piedmont area, and in stiff soils, the ginning report of 12,707 bales in 1927 shows that this is an important cotton area. Located as it is in relation to other dairying counties, this industry could be advantageously expanded here.

County Products	73,986 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	28,623	228	13,653	\$1,311,735	\$45.83
Corn	20,540	22	451,880	388,617	18.92
Wheat	11,267	11	123,937	178,469	15.84
Oats	3,115	19	59,185	42,021	13.49
Hay (Including Meadow)	3,251	.8	2,581	62,305	19.31
Horses and Mules*			3,828	418,636	
Cattle*			4,514	213,061	
Hogs*			4,314	50,474	

MACON COUNTY

South Mountain; population, 13,400; area, 328,320 acres; topography, high, mountainous, fertile valleys; waters, Little Tennessee, Nantahala rivers; railroads, Southern, Tallulah Falls; buslines, Ind. Coach; highways, Nos. 10, 28, 285, 286; incorporated cities and towns, ‡Franklin, Highlands.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	12	129	\$112,964	\$119,564	\$408,444	\$288,880
Establishments, chiefly Lumber.						

Forest Products.—The forest area is approximately 248,732 acres, comprising 75 per cent of the total land area. Some 33 per cent of the forest area is farm woodland, including some 24,000 acres of woodland pasture. Of the forest land outside of farms as much as 60 per cent is held in large timber tracts. The principal merchantable species are poplar 15 per cent, oaks 40 per cent, chestnut 20 per cent, hemlock 10 per cent.

The estimated present total stand of 485,000,000 board feet of saw timber is fairly accessible by mountain roads.

The Nantahala National forest includes much of the rougher forest land of the county. While most of this was cut over before it was purchased by the Government, it will eventually yield a perpetual supply of second growth timber which will form a valuable reserve supply to any industry which may be established.

Some ten sawmills produce about 20,000,000 board feet of lumber per annum. A considerable quantity of cordwood ties, telephone poles and bark are also produced each year. The estimated stumpage value of the timber cut annually is around \$140,000.

Mineral Products.—The economic minerals produced in this county are mica, kaolin, and asbestos. Near Norton and on Commissioners creek good asbestos occurs. The principal localities where corundum occurs are on Hickory Knoll creek, near Ellijoy and Cullasaja, on the summit of Turkey Knob and in the gravels of Cowee creek. A good grade of garnet schist occurs in large quantities three miles north of Franklin. Kaolin clay occurs four miles northwest of Franklin, on Tremont mountain, four miles north of Franklin, near West Mills, along Watauga creek and to the southwest of Franklin. Mica occurs near Iotla, West Mills and along with the clay deposits.

Water Resources and Power.—Waters: Little Tennessee, and Nantahala rivers, Tellico, Cowee, Cullasaja, Cartoogechaye, Coweeta, Middle, Burnington and other creeks, Emory lake. Water: Surface supplies abundant in sources and flows available, chemical and physical qualities very excellent. Power: 1,500 h. p. hydro-electric plant of Jupollo P. S. Co., on Little Tennessee river. Highlands has a 250 h. p. municipal hydro-electric plant on Cullasaja creek. These waters estimated to have a total of 10,000 undeveloped horsepower.

Agricultural Products.—The highway system is bringing this fertile section in closer touch with North Carolina. The principal crops are corn,



hay and wheat, but there are good opportunities for producing almost any crop, with the exception of cotton. Livestock is given considerable attention. One hundred fifty-three thousand fruit trees of bearing age are reported, over 3,000 colonies of bees, over 6,000 hogs disposed of in 1927, 1,240 sheep ewes on farms, 24 tractors used and 35 silos, 488 tenants operate on its farms.

County Products	28,224 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	14,058	22	309,276	\$275,256	\$19.58
Wheat	4,668	9	42,012	73,521	15.75
Cow Peas	304	10	3,040	4,560	15.00
Rye	1,173	11	12,903	16,258	13.86
Hay (Including Meadow)	5,592	.8	4,702	94,040	16.00
Horses and Mules*			2,294	243,066	
Cattle*			5,567	262,762	
Hogs*			6,039	70,656	

MADISON COUNTY

In West Mountain; population, 20,083; area, 279,040 acres; topography, high, mountainous; waters, French Broad river; railroad, Southern; bus-line, A. E. Carter; highways, Nos. 20, 31, 69, 208, 209, 212, 213; incorporated cities and towns, Hot Springs, Mars Hill, †Marshall.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	7	85	\$55,816	\$158,784	\$259,989	\$101,205

Lumber is chief industry in this county.

Forest Products.—The forest area is approximately 155,391 acres, comprising 56 per cent of the total land area. More than 68 per cent of the forest area is farm woodland, including some 44,000 acres of woodland pasture. Of the forest land outside of farms nearly 90 per cent is held in large timber tracts. The principal merchantable species are chestnut 45 per cent, oaks 20 per cent, yellow pine 5 per cent.

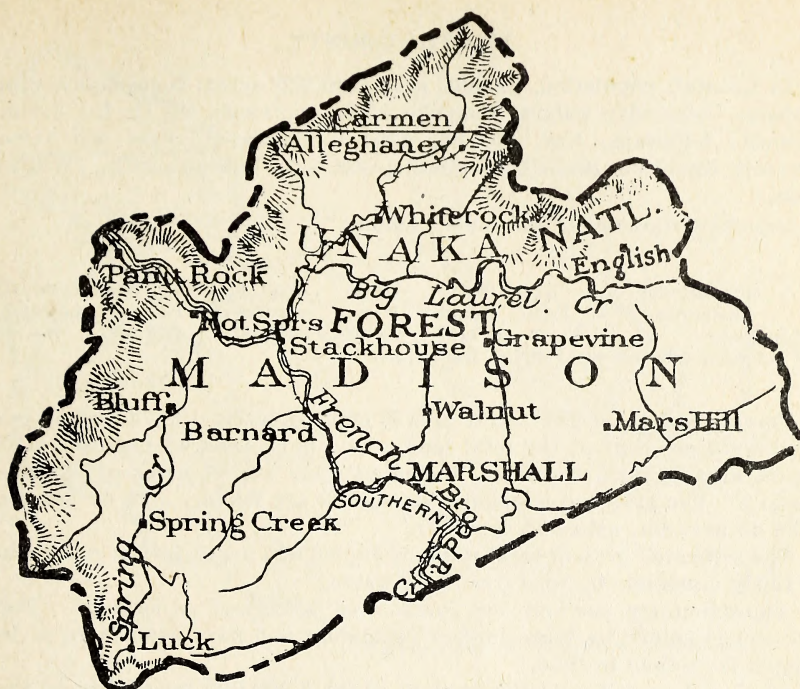
The estimated present total stand of 45,000,000 board feet of saw timber is fairly accessible by roads and rail.

The county lies between two large wood-using centers, Asheville and Newport, Tenn., and has excellent transportation facilities to both places.

Half a dozen sawmills produce about 4,000,000 board feet of lumber per annum. A considerable quantity of pulpwood and ties are also produced each year. The estimated stumpage value of the timber cut annually is around \$60,000.

Mineral Products.—In this county a barite belt five miles long extends from Bluff in a northeast direction through Doe Run. Another deposit occurs six miles south of Hot Springs. Coal occurs in a small area three miles from Hot Springs up Jack's creek from the French Broad river. Corundum was first mined in this state from this county three miles below Marshall, it also occurs just above the mouth of Big Ivy creek. Some very good brown iron ores occur near Tannelina and Shut-In creek. Near Big Ivy creek a large deposit of magnetite occurs. Titaniferous magnetites occur in the southwestern part of the county in the Newfound Mountains. A four-foot seam of good manganese ore occurs on the east side of Shut-In creek. In the vicinity of Marshall and Hot Springs there are lenses of high calcium 84%, and high magnesium (42%) limestone. This is the chief limestone producing center of the state. Four miles south of Marshall on Trail Branch is a 100-foot dike of semi-kaolinized feldspar. Talc has been produced from near Marshall. Mineral production in the county for 1926 was \$103,996.

Water Resources and Power.—Waters: Ivy, French Broad rivers; Big Laurel, Shelton Laurel, Spring, Pine, Walnut, Spillcorn Calvin, Meadow Fork, Sandymush, and other creeks. Water: Sources of large and smaller surface supply numerous, chemical and physical characteristics excellent in all respects. Power: A 4,000 h. p. hydro-electric plant of Carolina Power at Marshall; transmission lines radiate from this plant; 60,000 volt line east; 60,000 volt line south, which ties in with other lines at Weaver



plant; a 6,600 volt line north to Hot Springs. The French Broad estimated to have total of 124,000 undeveloped horsepower.

Agricultural Products.—This county affords the gateway from Tennessee into the Asheville territory, and resorts of western North Carolina, along the French Broad river. Corn, wheat, and oats are important, while hays occupy 28 per cent of the cultivated area. The cultivated land makes up about 20 per cent of the total area. Ten thousand cattle and almost 5,000 sheep, and 128,000 fruit trees are important farm features. There are more than 2,000 colonies of bees, 829 acres of home gardens, 68,500 hens, and 2,000 ewe sheep and over 3,000 hogs disposed of in the county.

County Products	40,032 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	16,387	24	393,288	\$361,825	\$22.08
Wheat	7,477	9	67,293	82,770	11.07
Oats	4,868	14	68,152	42,254	8.68
Rye	1,642	10	16,420	23,316	14.20
Hay (Including Meadow)	8,713	.9	7,612	175,076	20.70
Horses and Mules*			3,522	366,126	
Cattle*			10,370	489,464	
Sheep*			4,625	54,113	
Fruit	77,267	Apple trees	104,084 Bu.		

MARTIN COUNTY

In Coastal; population, 22,900; area, 280,320 acres; topography, piney uplands, lowlands; waters, Roanoke river; railroads, A. C. L.; busline, Transit; highways, Nos. 30, 90, 125; incorporated cities and towns, Everett, Hamilton, Hassell, Jamesville, Oak City, Robertsonville, ‡Williamston.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	9	49	\$27,934	\$78,575	\$173,308	\$94,733
Agricultural Implements, Fertilizer, Lumber, etc.						

Forest Products.—The forest area is approximately 198,732 acres, comprising 70 per cent of the total land area. More than 45 per cent of the forest area is farm woodland, including some 13,787 acres of woodland pasture. The principal merchantable species are loblolly pine 60 per cent, gum 35 per cent, oaks and cypress.

The estimated present total stand of 60,000,000 board feet of saw timber is fairly accessible by roads, rail and water.

Approximately one-half the forest area is classed as swamps. These are owned chiefly by large lumber companies and have been more or less logged from time to time.

Some eight small sawmills produce about 3,000,000 board feet of lumber per annum. A considerable quantity of ties and veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$20,000.

Water Products.—This is one of the counties along the fresh water shores of Albemarle sound shipping shad and herring, amounting to 630,000 pounds, valued at \$31,500.

Water Resources and Power.—Waters: Roanoke river; Conoho, Sweetwater, Collie swamp, Tranters, Crisp, and other creeks; shallow and deep well underground supplies. Water: Data inadequate, supplies usually obtained from shallow wells. Roanoke river, Tranter's and other creeks available for large surface supplies, water satisfactory for general industrial and domestic use after filtration. Power: Electric Power supplied in northwestern part by 11,000-volt transmission line to Oak City and Hamilton from Scotland Neck. In the southwestern part by a 13,000-volt transmission line to Parmele and Robersonville from Greenville.

Agricultural Products.—Along the northern border of the county is a high plateau, adjacent to the Roanoke river containing many large and productive farms. Three cash crops, cotton, tobacco and peanuts, are grown in large areas. There is quite a nice diversification, as shown in the table below and the gross value of crops is brought to a high figure. Quite an acreage of Irish potatoes is grown in the region of Robertsonville, 79 cars having been shipped in 1927. Considerable double cropping is done in this territory and the county's agricultural value has been enhanced by new markets through the opening of the Williamston Bridge.



County Products	76,034 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Peanuts	22,723	940	21,359,620	\$1,067,981	\$47.00
Corn	20,448	26	531,648	531,648	26.00
Tobacco	16,329	750	12,246,750	2,694,285	165.00
Cotton	11,281	250	5,900	558,410	49.50
Hay (Including Meadow)	10,865	.5	5,334	112,014	10.50
Horses and Mules*			4,875	558,909	
Cattle*			1,591	75,095	
Hog**			17,052	199,504	

McDOWELL COUNTY

In Mountain; population, 18,900, area 283,520 acres; topography, high; mountainous, fertile valleys; waters, Catawba, Second Broad, rivers; railroads, Southern, C. C. & O.; buslines, B. & H., Higgins, Hamrick, E. A. Gaultney; highways, Nos. 10, 19, 104, 105, 194; incorporated cities and towns, Marion, Nebo, Old Fort.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	25	2,495	\$1,563,313	\$4,777,439	\$8,001,835	\$3,224,396
Furniture	4	302	217,139	526,521	1,202,739	676,218
Other Forest Products	7	94	66,940	162,485	279,718	117,233
Textiles and their products	5	1,805	996,115	2,765,260	4,759,233	1,993,973
Miscellaneous Industries	9	294	283,119	1,323,173	1,760,145	436,972

Forest Products.—The forest area is approximately 220,189 acres, comprising 77 per cent of the total land area. More than 29 per cent of the forest area is farm woodland; including some 13,396 acres of woodland pasture. The principal merchantable species are chestnut, 35 per cent, pine, 25 per cent, oak, 20 per cent.

The estimated present total stand of 200,000,000 (National Forest not included) board feet of saw timber is fairly accessible.

With the exception of the considerable areas comprised in the National Forest and owned by lumber companies, the forests have been cut over several times. A fine sentiment prevails against wood burning. Then educational work done by the U. S. Forest Service and by the State Forest Service is showing good results.

Some 20 sawmills produce about 4,000,000 board feet of lumber per annum. A considerable quantity of extract wood and ties and pulpwood is also produced. The estimated stumpage value of the timber cut annually is around \$25,000.

Mineral Products.—On the lower slopes of the Linville Mountains there are lenses of brown iron ore and in the western part of the county occur lenses of graphitic slates which were mined for several years at Graphiteville. Limestone occupies three areas in the northern part of the county near the North Fork of the Catawba river, the most extensive one is near Linville Falls station, near Woodlawn and two miles to the southeast are the other two areas. The limestone is white to gray in color and contains 52 per cent to 62 per cent calcium carbonate and from 33 per cent to 41 per cent manganese carbonate. One-half mile to the southwest of Marion a variable gneiss occurs. Kaolin clays have been reported but little is known of them.

Water Resources and Power.—Waters: Catawba, North Fork Catawba, and Second Broad rivers; Cove, North Muddy, South Muddy, Crooked, Buck, Armstrong, Curtiss, Jarrett, Mill, and other creeks. Water: Many sources of large and small surface supplies are available from typical mountain streams; excellent physical and chemical characteristics obtain. Power: A 300 h.p. hydro-electric plant at Lake Tahoma on Buck Creek, with 6,600 volt transmission line to Marion. Double circuit 100,000-volt transmission line of Duke Power enters Marion from their Bridgewater hydro plant. Estimate 5,000 undeveloped horsepower.



Agricultural Products.—Situated on the eastern slope of the Blue Ridge, that is more of a mountain county than one of the Piedmont type. It is well located for fruit growing. Grain crops make up its principal crop products. Livestock is given no especial attention. It had, in 1927, about 27,000 hens of laying age; 1,555 colonies of bees and 40 tractors. Being located on main state highways, its crops can easily reach the summer tourist markets, as well as the Piedmont manufacturing centers. Dairying should do well here.

County Products	23,044 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	11,709	24	281,016	\$242,745	\$20.73
Wheat	3,929	9	35,361	55,163	14.04
Rye	1,681	10	16,810	23,198	13.80
Soy Beans	1,554	14	6,524	9,264	19.88
Hay (Including Meadow)	1,547	1.1	1,673	34,297	22.55
Horses and Mules*			1,566	17,066	
Cattle*			2,884	136,125	
Hogs*			2,072	24,242	

MECKLENBURG COUNTY

In South Piedmont; population, 89,800; area, 382,080 acres; topography, fertile, high, rolling; waters, Catawba river; railroads, N. S., P. & N., Seaboard, Southern; buslines, Southern, Queen City, Camel City, B. & H., Intercarolinas, Safety Transit; highways, Nos. 15, 20, 26, 27, 74, 261, 271; incorporated cities and towns, *Charlotte, Cornelius, Davidson, Hunters, Matthews.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	150	8,122	\$8,013,982	\$33,483,468	\$52,851,356	\$19,367,888
Fertilizer	4	179	139,976	1,117,041	1,316,089	199,048
Food and Kindred Products	23	484	527,968	9,403,957	11,753,853	2,349,896
Foundry Products and Textile Machinery	15	380	467,602	601,568	1,934,083	1,332,515
Printing and Publishing	14	196	339,132	561,592	2,093,000	1,531,408
Textiles and their products	38	4,820	4,120,220	10,447,782	17,808,302	7,360,520
Wood using Industries	9	301	427,808	905,980	1,956,327	1,050,347
*Miscellaneous	47	1,762	1,991,276	10,445,548	15,989,702	5,544,154

*Includes Automobiles, Rubber Tires, Cast Iron Pipe, Cotton Seed Oil, etc.

Forest Products.—The forest area is approximately 171,221 acres comprising 44 per cent of the total land area. More than 38 per cent of this is farm woodland, including 15,800 acres of woodland pasture. The principal merchantable species are shortleaf pine 80 per cent, and oak 15 per cent.

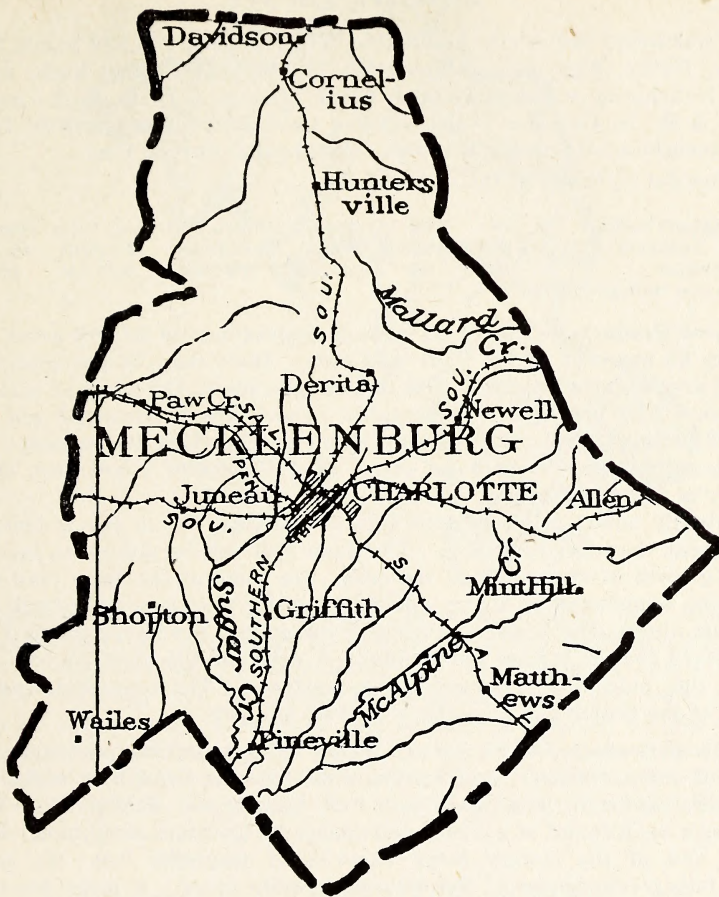
The estimated present total stand of 30,000,000 board feet of saw timber is fairly accessible by road.

Some 20 sawmills produce about 3,500,000 board feet of lumber per annum. Some 10,000 ties are also cut. The estimated stumpage value of the timber cut annually will not exceed \$20,000.

Mineral Products.—Gold has been mined from a great number of places in this county but none is being produced at the present time. Within a radius of five miles of Charlotte numerous granite outcrops occur which have been quarried for many years. Near Belmont Springs east of Charlotte a large exposure of leopardite is found. Some sand and gravel suitable for construction work is found in the stream beds in the vicinity of and to the west of Charlotte. Total value of the mineral production in the county for 1926 was \$185,230.

Water Resources and Power.—Waters: Catawba river; Davidson, McDowell, Long, Mullard, Paw, McAlpine, Little Sugar, McMullen, Fourmile, and other creeks; New Catawba and Mountain Island lakes in part. Water: Surface supplies, generally available over county; chemical quality, generally very good, physical quality, good on streams not receiving wastes, except for moderately high turbidities on some streams. Power: Duke Power has 82,400 h. p. hydro-electric development on Catawba River at Mountain Island, delivered to the high tension transmission system, ample power available to practically all sections.

Agricultural Products.—The city of Charlotte, being the county seat and centrally located in the manufacturing belt of the two Carolinas, gives the farmers a convenient and large market for vegetables, fruits and meats. The northern portion of this county is in the rich soiled grain



country, and the southern in the lighter, cotton soil. About 40 per cent of the area is in cultivation; 44 per cent of which is devoted to cotton of which 22,736 bales were ginned in 1927, 236 acres of field truck crops, and about 100,000 hens on farms and 143,000 mature apple and peach trees were reported. Ten thousand and four dairy cattle reported in 1927 speaks well of this interest and a large amount of hay was produced. Something over 300 tractors were in use last year.

County Products	132,369 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	58,141	342	29,435	\$2,814,024	\$48.40
Corn	45,209	21	949,389	863,944	19.11
Wheat	5,860	12	70,320	101,964	17.40
Cow Peas	2,619	12	31,428	49,028	18.70
Hay (Including Meadow)	8,304	1.1	9,236	212,428	25.30
Horses and Mules*			6,606	740,002	
Cattle*			10,750	507,400	
Hogs*			5,334	62,408	

MITCHELL COUNTY

In Northwest Mountain; population, 11,278; area, 136,320 acres, topography, fertile, high, mountainous, Mt. Mitchell, 6,711 feet high; waters, Toe, Nolichucky rivers; railroads, Black Mountain, C. C. & O.; busline; E. T. & W. N. Co., Mo. Transportation Company; highways, Nos. 19, 69, 197; incorporated cities and towns, †Bakersville, Spruce Pine.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	16	308	\$249,506	\$280,858	\$979,788	\$698,930
Lumber the leading industry.						

Forest Products.—The forest area is approximately 84,306 acres, comprising 62 per cent of the total land area. More than 53 per cent of the forest area is farm woodland, this including some 14,434 acres of woodland pasture. The principal merchantable species are chestnut 35 per cent, oak 30 per cent, poplar 15 per cent, maple and hemlock 15 per cent.

The estimated present total stand of 120,000,000 board feet of saw timber is fairly accessible.

Virtually none of the original growth remains. More oak is being cut at present than anything else. The deep rich soil in the coves favor the rapid growth of chestnut and the oaks. On some of the farm land which has been abandoned on slopes and ridges white pine is coming back.

Some nine sawmills are operating in the county producing about 2,375,000 board feet of lumber per annum. A considerable quantity of extract wood, ties, poles and pulpwood is also produced. The estimated stumpage value of the timber cut annually is around \$20,000.

Mineral Products.—This county is the most important producer in the state of mica, feldspar, and kaolin. Asbestos, the amphibole and fibrous enstatite, occurs in large quantities near Ledger and Bakersville. Emeralds have been found at a number of places on Crabtree mountain. In the north end of the county large deposits of magnetic iron ore occurs. Near Bakersville lenses of the massive kyanite occur. A large deposit of dolomitic marble occurs on the north bank of the North Toe river near the mouth of Sinkhole creek. Large deposits of kaolin clay occur along the north Toe river from one mile southeast of Spruce Pine to Penland. Five large pits are worked at the present time. Feldspar and mica occur in large quantities in the vicinity of Spruce Pine and Penland. Feldspar and mica occur in large quantities in the vicinity of Spruce Pine and Penland. The total of the mineral production in the county for 1926 was \$1,038,316.

Water Resources and Power.—Waters: Nolichucky and North Toe rivers; Bear, Beaver, Cane, Rock, Pigeon Roost, Little Rock, and other creeks. Water: Streams are of mountain type and physical and chemical qualities of water are considered to be exceptionally good. Power: Carolina Power has a 60,000-volt transmission line serving Spruce Pine and southern section of county. Service can be extended generally over county as needed. On the Nolichucky river, estimated 38,900 undeveloped horsepower.



Agricultural Products.—The State Highway System has helped this county greatly by connecting it with rapid transit transportation facilities. Lying between the Blue Ridge and the Tennessee line, a mountainous territory, rich in livestock and possibilities, but with a small area in cultivation. A third of this acreage is in corn, 45 per cent in hay crops, and 12 per cent in oats. It has 63,000 apple trees of bearing age, 616 equivalent acres in home gardens, 27,000 hens, over 1,000 ewe sheep and one tractor and 318 tenant farmers. Seed Irish potatoes opportunities are open for development.

County Products	19,998 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	6,558	24	157,392	\$173,131	\$26.40
Oats	3,755	20	75,100	50,317	13.40
Wheat	1,457	9	13,113	19,669	13.50
Irish Potatoes	621	99	61,479	71,316	115.00
Hay (Including Meadow)	7,692	.7	5,431	124,913	16.10
Horses and Mules*			1,705	174,287	
Cattle*			3,511	165,719	
Hogs*			2,687	31,438	

MONTGOMERY COUNTY

In Central Piedmont, South Sandhills; population, 14,607; area, 318,720 acres; topography, rolling, fertile; waters, Uharie, Yadkin, Little rivers; lakes, Badin; railroad, N. S. S.; buslines, Greensboro-Fayetteville, Safety; highways, Nos. 51, 70, 74, 75, 109, 170, 512, 515; incorporated cities and towns, Biscoe, Candor, Mt. Gilead, Star, †Troy.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	21	771	\$521,701	\$1,741,716	\$2,709,063	\$967,347
Forest Products	9	188	109,425	588,256	825,122	236,866
Textiles and their products	5	510	357,436	927,471	1,512,093	584,622
*Miscellaneous	7	73	54,840	225,989	371,848	145,859

*Includes Clay and Stone products, Cotton Seed products, Foundries, etc.

Forest Products.—The forest area is approximately 258,310 acres, comprising 79 per cent of the total land area. More than 38 per cent of the forest area is farm woodland, including some 10,357 acres of woodland pasture. The principal merchantable species are old field pine chiefly shortleaf 70 per cent, oaks 15 per cent, poplar and sweet gum.

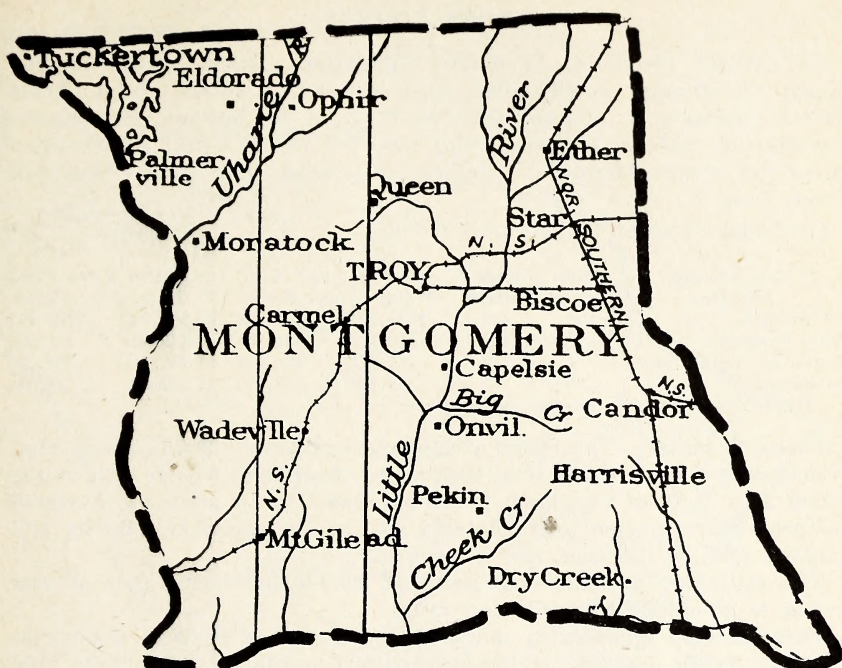
The estimated present total stand of 50,000,000 board feet of saw timber is fairly accessible.

The western part is broken and supports a forest of hardwoods and shortleaf pine. The northern and eastern part was originally covered with longleaf pine. This is now a mixed loblolly and shortleaf pine region. In the south central part are some stands of pure loblolly pine.

Some 40 sawmills are operating in the county producing about 20,000,000 board feet of lumber per annum. A considerable quantity of ties and a few red cedar poles are also cut. The estimated stumpage value of the timber cut annually exceeds \$100,000.

Mineral Products.—This county contains the greatest amount of brick and tile clays and shales found in the state. The best slates occur in the western part of the county. Gold has been mined from many locations but especially in the vicinity of Candor and Eldorado and some of the old mines are now being examined to determine the possibility of further development. Near Candor pottery clays are found. Sand and gravel is found in the southeastern part of the county. Mineral products in the county for 1926 amounted to \$97,953.

Water Resources and Power.—Waters: Yadkin, Little, and Uharie rivers; Cheek, Big, Mountain and Naked creeks; Tallassee, and Norwood Station lakes. Water: Surface sources adequate for large demands, numerous, chemical qualities, generally excellent and satisfactory for practically all purposes; physical quality, excellent, with turbidities prevailing high in larger streams and moderately high in the small ones at times of high storm flow. Power: Three large power sites on Yadkin river; 108,000 h. p. Narrows plant, 28,900 h. p. development, Falls plant, both property Tallassee Power Co., and 87,800 h. p. development, Carolina Power, Norwood plant, a total of 224,700 h. p. Output Norwood plant used for public utility purposes; Tallassee Power



used largely for Badin Aluminum works. A number of transmission circuits extend over the county and power can be made available to others whenever needed.

Agricultural Products.—This is an important peach county and in the southeastern a smaller portion, more than 232,000 trees of bearing age are to be found. Three hundred fifty-four full carloads of peaches were shipped in 1927. A smaller proportion of the county is in cultivation than any other in the Piedmont belt. Landowner and tenant operation of farms are about equal. Wheat and oats are important. The soil is not naturally fertile, but is suitable for a large variety of crops.

County Products	49,885 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	15,282	18	275,076	\$255,821	\$16.74
Cotton	13,695	248	7,105	672,479	49.10
Wheat	7,757	9	69,813	97,738	12.60
Oats	4,341	19	82,479	61,034	14.06
Hay (Including Meadow)	2,043	1.1	2,144	42,880	22.00
Horses and Mules*			2,439	275,969	
Cattle*			2,801	132,207	
Hogs*			2,772	34,432	

MOORE COUNTY

In Central Piedmont, Sandhills; population, 24,300; area, 408,960 acres; topography, north hilly, south sandhills; waters, Deep, Little Rivers; railroads, N. So., Seaboard, M. C., A. & R.; buslines, Greensboro-Fayetteville, Safety; highways, Nos. 50, 70, 74, 75, 702; incorporated cities and towns, Aberdeen, Cameron, †Carthage, Pine Bluff, *Southern Pines, Vass.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	34	485	\$329,506	\$748,633	\$1,504,030	\$755,397
Forest Products	17	161	119,101	164,765	436,004	271,239
Textiles and their products	4	252	147,871	426,518	735,746	309,228
*Miscellaneous	13	72	62,534	157,350	332,280	174,930

*Includes Food products, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 329,735 acres, comprising 80 per cent of the total land area. More than 37 per cent of the forest area is farm woodland, including some 16,918 acres of woodland pasture. The principal merchantable species are shortleaf, loblolly and longleaf pine 90 per cent, oak 5 per cent.

The estimated present total stand of 80,000,000 board feet of saw timber is accessible by roads and rail.

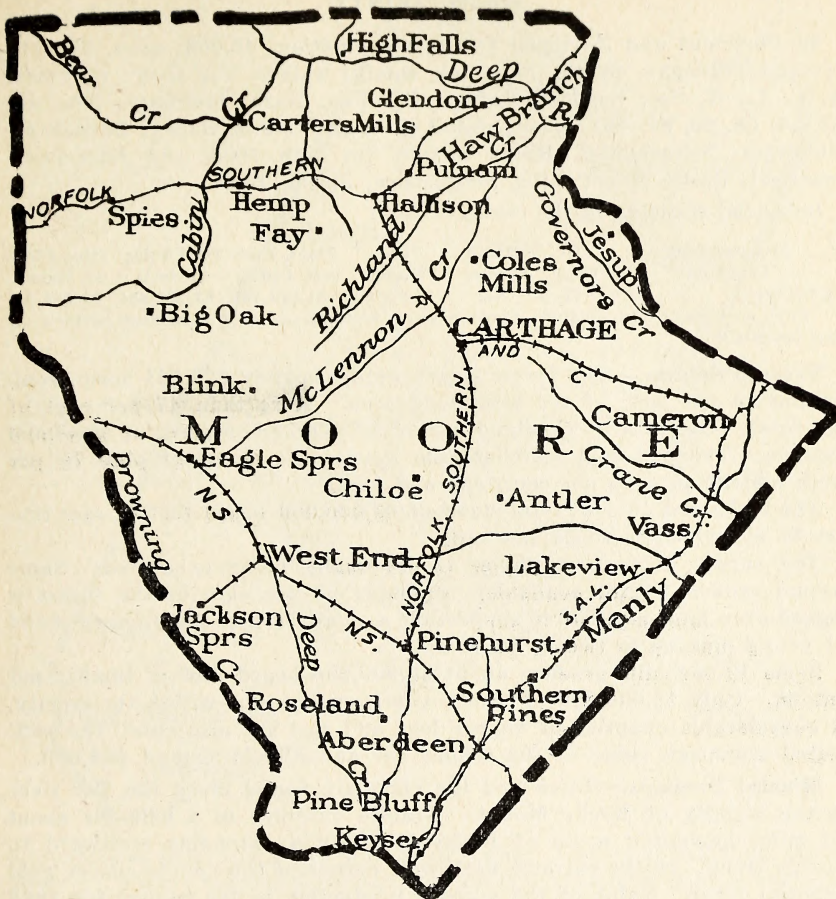
Three general types exist, shortleaf pine and hardwoods in the northern clay region, longleaf in the southeastern sandhills and loblolly pine in the transition belt between.

Some 40 sawmills produce about 20,000,000 board feet of lumber per annum. Probably 100,000 oak ties are also made and shipped. The estimated stumpage value of the timber cut annually is around \$80,000.

Mineral Products.—Brick and tile clays occur in the extreme north-eastern part of the county. Sand and gravel occurs in the southern part of the county at a number of locations. Pyrophyllite (talc) occurs in a series of lenses from Glendon to Hemp and this is the only deposit of such material in the United States which is worked commercially. Many types of excellent building stone are found here. Mineral production in the county for 1926 was \$213,864.

Water Resources and Power.—Waters: Deep and Lower Little (headwaters) rivers; Drowning, Little Governors, Bear, Cabin, McLennon, Crains, Deep, Aberdeen, and other creeks. Water: Surface supplies of "Sandhill" type generally available over county, chemical quality, excellent, physical quality, generally excellent but with moderately high turbidities prevailing on some of larger streams. Power: Served by Carolina Power extensive network high and lower voltage lines which can furnish practically unlimited amounts of power. Rural power lines, (mostly privately owned), serving some communities.

Agricultural Products.—The southern part of this county has developed from a seemingly worthless, cut-over Sandhill area to a renowned fruit, and trucking section. It shipped last year 973 solid cars of peaches, 263 of dewberries, and several more of melons and truck. Seven hundred eleven thousand three hundred and three peach trees of bearing age



are reported. Almost 80 per cent of the cropping is done by the land owners, a favorable showing. The type of soil is not suited for good grazing and the livestock industry is weak. The northern portion of the county is adapted to small grains and grasses and here the main dewberry area is located. The Pinehurst farms offer good demonstrations of what the sandy-land country can be made to produce and there are large areas of such undeveloped acres in most parts of the county.

County Products	65,497 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	22,094	20	441,880	\$441,880	\$20.00
Cotton	11,001	259	5,961	561,304	51.02
Wheat	7,986	10	79,860	117,394	14.70
Tobacco	5,167	723	3,735,741	896,578	134.00
Hay (Including Meadow)	2,287	.9	2,109	46,398	19.80
Horses and Mules*			3,211	359,965	
Cattle*			3,595	169,684	
Hogs*			4,083	47,771	

NASH COUNTY

In Piedmont and Northern Coastal; population, 46,000; area, 375,040 acres; topography, fertile, hilly, low sandy; waters, Tar river; railroads, A. C. L., N. So.; buslines, Safety, Carolina, Nash; highways, Nos. 40, 43, 56, 58, 90, 91, 561; incorporated cities and towns, Bailey, Battleboro, Middlesex, *Nashville, *Rocky Mount, (in both Nash and Edgecombe counties), Rocky Mount Mills, Sharpsburg, Spring Hope.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	22	860	\$591,072	\$1,979,738	\$3,364,694	\$1,384,956

Food products, Forest products, Clay products, Textile products, Cotton Seed products are chief industries.

Forest Products.—The forest area is approximately 222,561 acres, comprising 59 per cent of the total land area. More than 47 per cent of the forest area is farm woodland, including some 8,585 acres of woodland pasture. The principal merchantable species are shortleaf pine 75 per cent, loblolly pine 20 per cent, oak and gum.

The estimated present total stand of 65,000,000 board feet of saw timber is accessible by roads and rail.

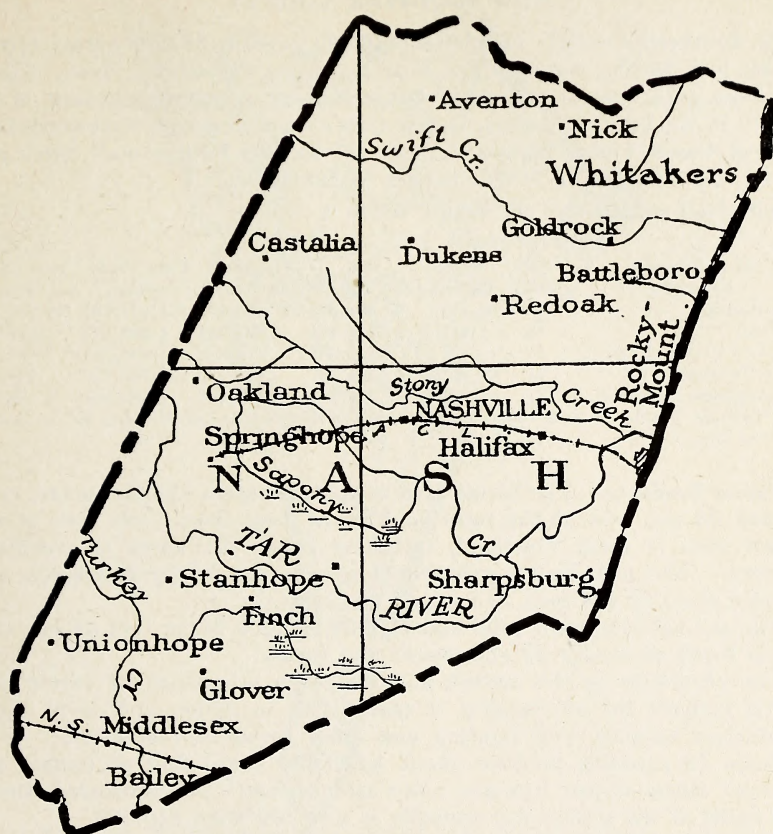
The supply of mature timber is practically being exhausted. Some second growth is still available. Probably 90 per cent of the forest is logged-over land most of it supporting a more or less satisfactory stand of young pine up to twenty years old.

Some 12 sawmills produce about 40,000,000 board feet of lumber per annum. Only 16,000,000 of which was from logs cut within the county. A considerable quantity of veneer logs and ties are also cut. The estimated stumpage value of the timber cut annually is around \$88,000.

Mineral Products.—Brick and tile clays are found along the Tar river in the vicinity of Rocky Mount. Granite outcrops in a belt for about 20 miles beginning north of Rocky Mount and extending westward to Spring Hope. In the extreme northwest corner of the county placer gold deposits occur. Value of the mineral production in the county for 1926 was \$114,400.

Water Resources and Power.—Waters: Tar River, Fishing, Swift, Stony, Big Peachtree, Pig Basket, Sapony, Little Sapony, Turkey, Moccasin, Toisnot, and other creeks. Water: The chemical quality is prevailingly good but either sedimentation or filtration is generally required on account of high turbidities and suspended matter. Power: At Spring Hope a hydro-electric development of 210 horsepower from an interconnection of the Carolina Power and Virginia Electric at Battleboro, high tension transmission lines run north and south across the county. Still another line is available to the southern section while low voltage lines, of the "rural power" class, extend into the central section to meet the needs of small communities and farms.

Agricultural Products.—The dividing line between the Piedmont and Coastal Plain belts runs through this county which includes varied types of farming. Cotton, corn and tobacco, in the order named, are the important crops. In the northern portion we find appreciable area in



peanuts and over 900 acres field truck, other than potatoes, were grown there in 1927. Twenty-four per cent of the cultivated land is operated by owners. The county ginned 40,775 bales of cotton last year and sold 34,862,000 pounds of farmers' tobacco at the Rocky Mount market.

County Products	124,532 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	48,945	283	28,978	\$2,770,287	\$ 56.60
Corn	33,774	22	743,028	787,610	23.32
Tobacco	28,745	699	20,092,755	4,621,334	161.00
Oats	2,638	22	58,036	40,625	15.40
Peanuts	2,497	990	2,472,030	123,602	49.50
Horses and Mules*			8,028	918,116	
Cattle*			3,605	170,156	
Hogs*			13,839	161,916	

NEW HANOVER COUNTY

In Southern Coastal; population, 46,400; area, 138,240 acres; topography, low, fertile; waters, Cape Fear Northeast, Brunswick rivers; Atlantic ocean port, coastal and ocean water routes; railroads, Seaboard, A. C. L., W. B. S.; buslines Safety, Queen City Coach, Seashore Transportation, Central Coach Lines; highways, Nos. 20, 30, 40; incorporated cities and towns, Carolina Beach, *Wilmington, Wrightsville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	60	2,295	\$2,301,303	\$7,072,478	\$11,912,234	\$4,839,756
Fertilizer	10	441	434,154	3,283,394	4,481,927	1,198,533
Food and Kindred Products	15	222	211,985	744,449	1,642,546	898,097
Forest Products	11	492	394,881	752,773	1,507,112	754,339
*Miscellaneous Industries	24	1,140	1,260,283	2,291,862	4,280,649	1,988,787

*Includes Textile products, Stone and Clay products, Foundry and Machine Shops, Cotton Seed Oil, etc.

Forest Products.—The forest area is approximately 128,346 acres, comprising 93 per cent of the total land area. Less than 6 per cent of the forest area is farm woodland, including some 931 acres of woodland pasture. The principal merchantable species are longleaf, loblolly and pocosin pines 90 per cent, and gum 6 per cent.

The estimated present total stand of 20,000,000 board feet of saw timber is fairly accessible by rail, water and roads.

The proximity to the market and the large proportion of forest land would indicate the advisability of specializing in timber and naval stores production coupled with hunting and other forms of recreation.

Some 12 sawmills produce about 1,500,000 board feet of lumber per annum. Some veneer logs and poles are also cut. The estimated stumpage value of the timber cut annually is now less than \$10,000.

Mineral Products.—Near Castle Hayne and on Smith Creek marl pits are found from which a very good grade of marl was produced. The thickness of the marl is from 12 to 15 feet showing from 35 per cent to 70 per cent calcium carbonate. Other localities where marls occur are near Fort Fisher, Carolina Beach, and along the northeast bank of Cape Fear river. Mineral production in the county for 1926 was \$26,739.

Water Products.—This county ranks among the best in the amount and value of commercial fisheries product. New Hanover county ships all forms of salt water products except crabs and scallops, including: 5,000 bushels of clams, 3,084 bushels of oysters, and 5,490,000 menhaden fish for fertilizers. Food fish amounted to 980,375 pounds, valued \$66,548.

Water Resources and Power.—Waters: Cape Fear, Northeast Cape Fear, and Brunswick rivers; Smith, Hewletts, Island, and other creeks; Myrtle, Masonboro, Middle, Topsail, and Prince George sounds; Onslow bay, Atlantic ocean. Water: Available from every class of source; general dependence underground supplies. In Wilmington filtered waters from the Cape Fear river are used. Underground waters obtainable give all degrees of satisfaction. Power: The Tide Water has a 15,000 h.p.



steam plant at Wilmington with 33,000 and lower voltage transmission lines radiating from Wilmington, interconnecting with Carolina Power, making power available in all parts of the county.

Agricultural Products.—Two-thirds of the limited farm area in cultivation in this county is in truck crops. The peanut crop is next in importance to the truck crops, if we exclude the feed crops, including corn and hay. The 716 cars of fruits and vegetables shipped during the past season from this county included lettuce 407, cucumbers 136, mixed vegetables 124, string beans 48. In proportion to the farm area, the hogs disposed of in 1927 was creditable to this county, as were the number of tractors used, dairy cows and poultry. This county contains the State's principal port, Wilmington, which is a large shipping point by rail, water and highway.

County Products	7,219 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Field Truck	3,753				
Corn	1,461	26	37,986	\$34,187	\$23.40
Peanuts	925	1,160	1,073,000	53,650	58.00
Sweet Potatoes	177	113	20,001	15,001	85.00
Hay (Including Meadow)	1,410	.8	1,127	24,794	17.60
Horses and Mules*			918	96,666	
Cattle*			1,223	57,726	
Hogs*			1,702	19,913	

NORTHAMPTON COUNTY

In Northwest Coastal Piedmont; population, 23,800; area 322,560 acres; topography, low, fertile, rolling; waters, Roanoke, Meherrin rivers; railroads, A. C. L., Seaboard; buslines, Transit; highways, Nos. 12, 40, 48, 305, 481; incorporated cities and towns, Rich Square, Seaboard, Woodland, Jackson.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	6	277	\$119,286	\$83,378	\$273,582	\$190,204

Lumber is the chief industry.

Forest Products.—The forest area is approximately 219,860 acres, comprising 68 per cent of the total land area. Nearly 38 per cent of the forest area is farm woodland including some 8,181 acres of woodland pasture. The principal merchantable species are loblolly pine 70 per cent, gums 15 per cent, popular oaks and cypress.

The estimated present total stand of 220,000,000 board feet of saw timber is fairly accessible by roads, rail and a very little by water.

Forests scattered through county, all in small holdings. The heavier stands are now in the swamps and hardwood bottoms. The wide market for timber is of distinct advantage to the land owner but is rapidly reducing the supply.

Some 12 sawmills produce about 6,000,000 board feet of lumber per annum. A large quantity of staves, veneer logs, piling and pulpwood are also produced. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—In the northwestern part of the county, especially along the Roanoke River as far south as Garysburg there are rather extensive gravel deposits. Mineral production in the county for 1926 was \$59,863.

Water Resources and Power.—Waters: Roanoke and Meherrin river; Kirby, Potecasi, Cattawisky, Uwharrie, and Bridgers creeks. Water: Excepting Roanoke river, streams of county typical of streams western Coastal Plain. In general chemical and physical qualities classed as entirely satisfactory. Roanoke river prevailingly high in turbidity and suspended matter. Tested by several years of municipal use, waters met both domestic and industrial needs, of a superior quality in practically all respects. Outside of the towns, shallow wells supply local needs, water of good quality. Power: Transmission circuits in northwestern and eastern sections of county. No section of the county greatly distant from transmission lines. Same company has a 7,800 h. p. hydro-electric development on the Roanoke river, near Roanoke Rapids. Undeveloped power sites on Roanoke river adjacent to this county, with potential possibilities of approximately 183,000 h. p., one or more of which may be developed within the near future.

Agricultural Products.—A glance at the crop table below gives evidence of fair diversification, except for the preponderance of cotton. This is one of the most important peanut counties of the State, and its cotton



(Size of map slightly reduced)

yields have ranked extremely high for several years. The fact that about 80 per cent of the peanut area harvested has the vines saved insures a much larger hay crop than is shown here. Northhampton county ginned 29,553 bales of cotton and disposed of 16,552 head of hogs in 1927. There were 141 tractors and 7,618 head of work stock employed in the county.

County Products	115,600	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
	Acreage				
Cotton	42,372	307	27,214	\$2,575,624	\$60.79
Peanuts	35,052	980	34,350,960	1,717,548	49.00
Corn	31,936	21	670,656	690,776	21.63
Oats	1,786	20	35,720	26,790	15.00
Hay (Including Meadow)	2,288	.5	1,178	23,560	10.00
Horses and Mules*			6,161	676,423	
Cattle*			3,135	147,972	
Hogs*			15,724	183,971	

ON SLOW COUNTY

In Eastern Coastal; population, 15,100; area, 475,520 acres; topography, low, fertile, swamps; waters, Oak, New rivers; railroads, A. C. L.; buslines, Seashore Transportation Co.; highways, Nos. 24, 30; incorporated cities and towns, ‡Jacksonville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	5	128	\$101,915	\$96,054	\$294,046	\$197,992
All Lumber establishments.						

Forest Products.—The forest area is approximately 384,820 acres, comprising 80 per cent of the total land area. More than 28 per cent of the forest area is farm woodland; including some 12,779 acres of woodland pasture. The principal merchantable species are loblolly 55 per cent, gum 20 per cent, mixed 25 per cent.

It is estimated that there still remains a total stand of 170,000,000 board feet of saw timber which is fairly accessible by roads, rail and water.

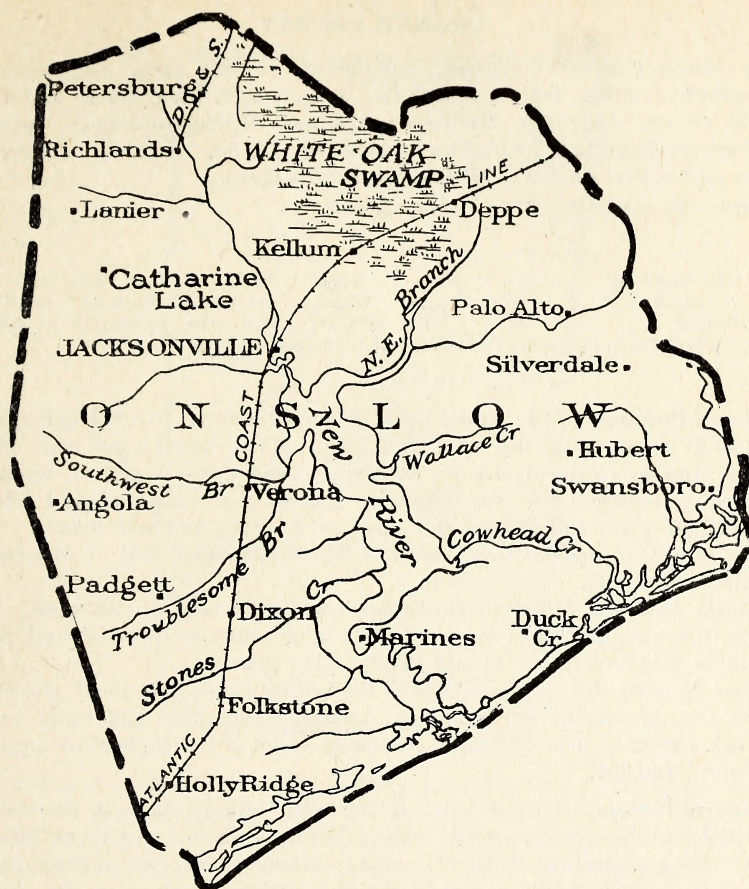
Holly Shelter and White Oak pocosins extend into the southern and northern parts. Some 70 per cent of the forest, however, is pine, nearly all of it heavily cut over. Much of the sandy land in the southwestern part is returning to scattered longleaf pine reproduction, now hogs are excluded.

Some 12 sawmills produce about 20,000,000 board feet of lumber per annum, while 30,000,000 feet of saw logs are shipped away for sawing. Some veneer logs and staves are also produced. The estimated stumpage value of the timber cut annually is around \$250,000.

Water Products.—Onslow county is famous for its cultivated beds of New River oysters, which oysters are sold as shell stock, there being no shucking houses located in the county. Trout, mullet and herring are the principal fish shipped from this county, amounting to 145,100 pounds valued at \$5,610 in 1927.

Water Resources and Power.—Waters: New and Whiteoak rivers; Southwest, Sandy Run, Shelter Swamp, Juniper, Northeast, Wallace, Queen's, Bear, and other creeks; Onslow bay; Atlantic ocean. Water: Surface supplies abundant, largely unpotable. Certain sources rendered satisfactory by refined treatment. Shallow wells relied on principally and in some areas they yield a soft water considered very satisfactory. Power: Territory paralleling Atlantic Coast Line railroad, south to Jacksonville; served by Carolina Gas and Electric Company, northwest section served by Tide Water Power Company.

Agricultural Products.—The agricultural area of this county is to be found principally in the northern portion, where most of the 12 per cent of the county under cultivation is situated. The new highway from New Bern to Wilmington increases the transportation facilities greatly and with further transportation this would be a good trucking county. It



shipped several cars of produce in 1927 and is the most important peanut county in the southeastern portion of the State. It ginned 1,262 bales of cotton last year and tobacco is the big money crop. Large areas of cut-over sandy land are to be found in the western and southern portions.

County Products	52,984 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	21,722	20	434,440	\$ 412,718	\$ 19.00
Tobacco	8,719	701	6,112,019	1,161,284	133.00
Peanuts	7,870	1,240	9,758,800	487,940	62.00
Cotton	4,235	180	1,595	147,124	34.74
Hay (Including Meadow)	4,925	.5	2,247	51,681	11.50
Horses and Mules*			2,536	281,144	
Cattle*			1,953	92,182	
Hogs*			20,745	242,717	

ORANGE COUNTY

In North Central Piedmont; population, 19,800; area, 249,600 acres; topography, rolling, fertile, slate hills; waters, Eno, Haw, North and South Little rivers; railroads, Southern; buslines, Hillsboro-Chapel, Carolina, Greensboro-Fayetteville; highways, Nos. 10, 14, 54, 75, 144; incorporated cities and towns, Carboro, *Chapel Hill, ‡Hillsboro.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	18	1,131	\$771,497	\$1,679,004	\$3,005,719	\$1,326,715

Textiles, Lumber, Printing and Publishing are the leading industries.

Forest Products.—The forest area is approximately 167,094 acres, comprising 67 per cent of the total land area. More than 63 per cent of the forest area is farm woodland; including some 9,505 acres of woodland pasture. The principal merchantable species are shortleaf and loblolly pine 70 per cent, oak 25 per cent, poplar, hickory and red cedar.

The estimated present total stand of 50,000,000 board feet of saw timber is fairly accessible.

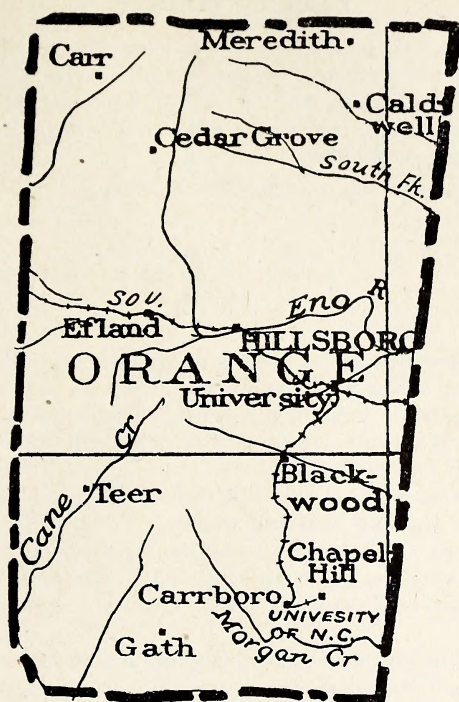
Nearly half the forest is hardwood, sometimes mixed with pine. This covers the rougher area in the middle and southern parts. Red cedar occurs in this and in the second growth pine type.

Some 40 sawmills are operating in the county producing about 10,000,000 board feet of lumber per annum. Around 50,000 ties and some veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—Clays suitable for brick making occur in the vicinity of Hillsboro. Granites occur at several localities in this county as follows: Three miles southwest Hillsboro; along Bolans creek; five miles west of Chapel Hill on the Pittsboro road; and at a number of places in the vicinity of Chapel Hill. Between Efland and Hillsboro a quarry is located from which the stone will come for the Greater Duke University. The value of the mineral production in the county for 1926 was \$28,150.

Water Resources and Power.—Waters: Eno, Haw (short stretch), North Fork Little, and South Fork Little rivers; Bolan, Cane, Booker, Collins, New Hope, Morgan's, Seven Mile, and other creeks. Water: Surface sources of supply, numerous; chemical quality, generally excellent; physical quality, generally good except for moderately high turbidities concurrent with storm flows. Power: Transmission circuits of Duke Power Company cross the county east-west by 34,000 h. p. steam plant on Eno river; 850 h. p. steam plant is operated in Chapel Hill by the University of North Carolina. Where not available electric power service is reasonably near.

Agricultural Products.—About one-fourth of the county is in cultivation. Tobacco is the outstanding crop in the north and some cotton is grown in the southern portion. Considerable wheat is grown in the central and western parts. A unique outcropping of mountainous country is



observed around Hillsboro. This county is rolling and is made up largely of the red, Cecil clay soils, with considerable rock and stones. It is suitable for fruit and livestock farming, which during the past few years, has developed considerably and still affords favorable opportunities.

County Products	58,463		Production or *Number	Value	
	Acreage	Yield Per Acre		Total	Per Acre
Corn	23,497	22	516,934	\$460,071	\$ 19.58
Wheat	10,462	10	104,620	140,191	13.40
Tobacco	6,310	588	3,710,280	964,673	153.00
Cotton	3,624	208	1,577	151,512	41.81
Hay (Including Meadow)	5,670	1.1	6,305	135,558	23.65
Horses and Mules*			3,492	364,188	
Cattle*			4,135	195,172	
Hogs*			3,850	45,045	

PAMLICO COUNTY

In Southeast Coastal; population, 9,060; area 224,000 acres; topography, fertile, flat, swamps; waters, Neuse, Pamlico rivers; Pamlico sound, Atlantic ocean; railroads, N. So., W. & V.; buslines, Oriental, Seashore; highways, Nos. 302, 304; incorporated cities and towns, †Bayboro, Oriental, Vandemere, Arapahoe, Stonewall.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	4	26	\$9,019	\$28,025	\$76,854	\$48,829

Forest Products.—The forest area is approximately 165,070 acres, comprising 73 per cent of the total land area. Only 14 per cent of the forest area is farm woodland; including some 6,332 acres of woodland pasture. The principal merchantable species are loblolly pine 80 per cent, gum 10 per cent, ash, oak and cypress.

The estimated present total stand of 60,000,000 board feet of saw timber is fairly accessible by road, rail and water.

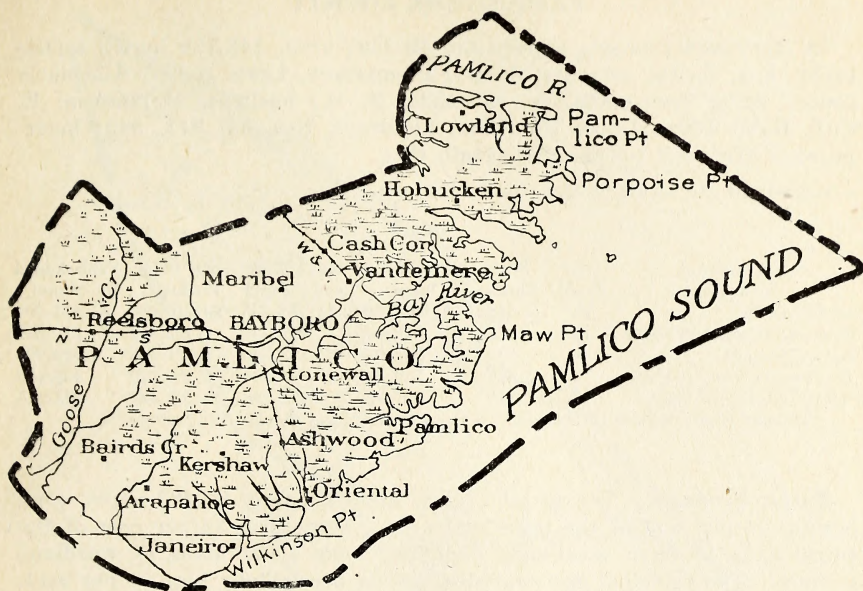
Some 30 per cent of the forest is swamp from which practically all the white cedar and cypress has been removed. The pine lands have been heavily cut over but now the stock law is effective longleaf pine is rapidly reappearing.

Some five sawmills produce about 8,000,000 board feet of lumber per annum. Some veneer logs and staves are also produced, three stave mills operating during the potato season. The estimated stumpage value of the timber cut annually is around \$40,000.

Water Products.—Pamlico county borders on the western side of the giant Pamlico sound which abounds in salt water fish of all varieties and shellfish of a select grade. During the year of 1927 this county lead the rest of the state in the quantity of oysters handled. Oriental and Vandemere are the principal centers of shipping, which in 1927 consisted of: 101,369 bushels of oysters, and food fish amounting to 862,770 pounds, valued at \$27,571.

Water Resources and Power.—Waters: Neuse, Bay and Pamlico rivers; Goose creek; Pamlico sound. Water: Satisfactory supplies are obtainable in certain areas from shallow wells, but cisterns depended upon principally. Power: Transmission circuit Carolina Gas and Electric paralleling railroad from New Bern to Oriental.

Agricultural Products.—Drainage districts have been employed in the swamplands of this county to make available valuable agricultural areas. As a result truck crops have gained a stronghold, with 1,181 loads shipped last year. It holds second place in sweet potatoes, with 356 cars shipped, and third rank in Irish potatoes, with 773 cars. This is largely an owner-ship-operated, agricultural county and has an active Potato Growers' Association. About 13 per cent of the area is in cultivation, which leaves extension tracts of cut-over, sandy soil and wooded, marshy soil.



(Map reduced to two-thirds size)

County Products	31,828 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	16,332	27	440,964	\$ 383,639	\$ 23.49
Irish Potatoes	5,515	133	733,495	1,026,893	186.00
Cotton	3,924	230	1,888	180,504	46.00
Soy Beans	3,338	16	53,408	65,692	19.68
Hay (Including Meadow)	2,527	.9	2,287	52,601	20.70
Horses and Mules*			1,661	175,483	
Cattle*			1,273	60,086	
Hogs*			4,974	58,196	

PASQUOTANK COUNTY

In Northeast Coastal; population, 18,300; area, 142,720 acres; topography, low, fertile, swamps; waters, Pasquotank, Little rivers; Albemarle sound, water transportation; railroads, N. S.; buslines, McPherson, E. City, Habit Bros., Lucas Bus Line; highways, Nos. 34, 341, 342; incorporated cities and towns, ‡*Elizabeth City.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	36	1,229	\$950,404	\$1,838,285	\$3,710,086	\$1,871,801
Food and Kindred Products	13	72	60,875	207,142	419,191	212,319
Forest Products	8	698	546,016	813,540	1,824,248	1,010,708
Textiles and their products	5	344	216,205	695,580	1,101,210	405,630
*Miscellaneous Industries	10	115	127,308	122,293	365,437	243,144

*Includes Clay products, Cotton Seed products, Foundry and Machine Shop products.

Forest Products.—The forest area is approximately 87,293 acres, comprising 61 per cent of the total land area. More than 34 per cent of the forest area is farm woodland; including some 4,420 acres of woodland pasture. The principal merchantable species are loblolly pine 75 per cent, gum 20 per cent, and oak 5 per cent.

The estimated present total stand of 60,000,000 board feet of saw timber is fairly accessible by roads, rail and water.

The Dismal Swamp area in the north supported a white cedar (juniper) forest. This has all been removed, as well as the cypress and other swamp species. Two-thirds of the forest area is pine land. This also is largely cut over.

Some 12 sawmills produce about 40,000,000 board feet of lumber per annum only one-half of which is cut within the county. Six million feet of veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$75,000.

Water Products.—Pasquotank is the leading county of the state in the amount of fresh water fish shipped, and ranks high among the salt water-shipping centers. It borders on Albemarle sound but draws a great part of its trade from the northern part of Pamlico sound. Elizabeth City is a trade center for the fishing industry of several adjoining counties. In 1927 it shipped 243 bushels of oysters and 2,530,100 pounds of food fish valued at \$264,201.

Water Resources and Power.—Waters: Pasquotank and Little rivers; Knobb's, New Begun, Little Flatty, Big Flatty, and Symonds creeks; Albemarle sound. Water: Surface sources numerous; natural potability low, satisfactory by proper filtration low areas adjacent Albemarle sound. Individual supplies from shallow wells, 8 to 20 feet deep, good grade of water. Deeper wells, less desirable grade of water. Cisterns used to some extent. Power: a 22,000-volt transmission circuit Virginia Electric, crosses the county from west and serves Elizabeth City territory, offering opportunity electrification to the other sections of the county.



Agricultural Products.—In proportion to its area, this is probably the second most important commercial truck county in the State, shipping 2,177 carlots of vegetables in 1927. Besides Irish potatoes, 173 cars of sweet potatoes, 275 of English peas, 58 of string beans and 7 cars of mixed vegetables, were shipped. Pasquotank county has long been known for its importance as a soy bean producing area. Succession and double cropping is a common practice, whereby many fields do double duty. The soil is naturally fertile and easily worked and it is a very attractive farming section of the State.

County Products	51,340 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	21,095	29	611,755	\$471,051	\$ 22.32
Cotton	7,793	285	4,199	407,486	52.29
Soy Beans	11,847	17	201,399	249,735	21.08
Irish Potatoes	5,274	134	706,716	968,201	184.00
Hay (Including Meadow)	3,826	1.1	4,332	95,304	24.20
Horses and Mules*			3,956	306,068	
Cattle*			3,865	182,428	
Hogs*			13,796	161,413	

PENDER COUNTY

In South Coastal; population, 14,788; area, 521,600 acres; topography, fertile, low, swamps, piney sandhills; waters, Cape Fear river; Atlantic ocean; railroads, A. C. L.; busline, Saffey; highways, Nos. 30, 40, 60, 601, 602; incorporated cities and towns, Atkinson, Burgaw, Watha.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	13	478	\$272,238	\$202,201	\$573,683	\$371,482

Forest products leading industry in the county.

Forest Products.—The forest area is approximately 464,334 acres, comprising 89 per cent of the land area. More than 23 per cent of the forest area is farm woodland; including some 13,926 acres of woodland pasture. The principal merchantable species are gum 30 per cent, pine 58 per cent, cypress 5 per cent and oak 5 per cent.

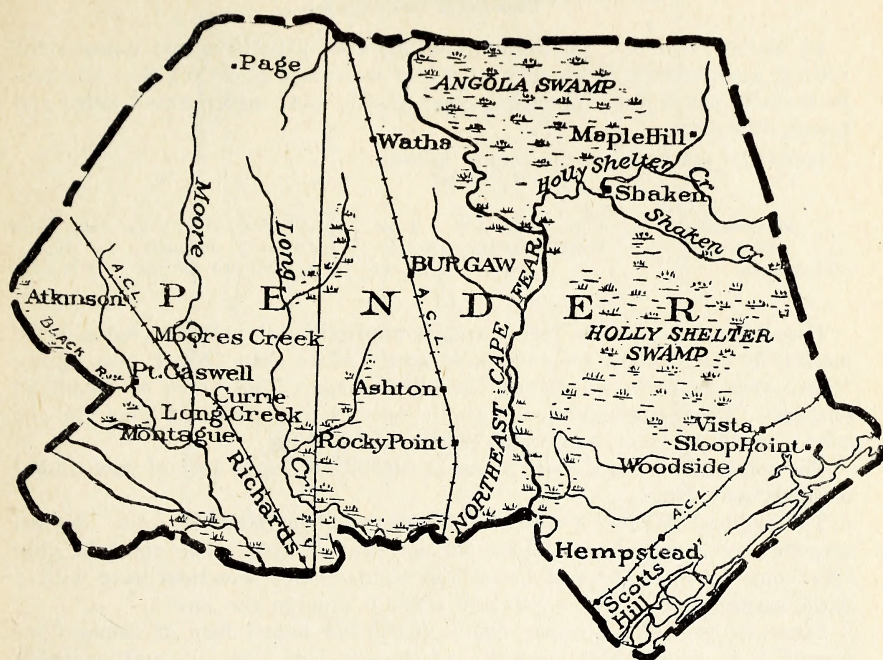
The estimated present total stand of 190,000,000 board feet of saw timber is fairly accessible by roads and rail.

Two of the largest swamp land areas in the State lie in the eastern part, Angola bay and Holly Shelter swamp. Though classed as forest land, much of this area is destitute of merchantable timber and there seems only a small prospect of bringing them to profitable production for timber alone.

One large and some 25 small sawmills produce about 20,000,000 board feet of lumber per annum. There is little other salable material. Pine straw used in the strawberry fields is a forest product. The estimated stumpage value of the timber cut annually is around \$80,000.

Water Resources and Power.—Waters: Cape Fear, Northeast Cape Fear, and Black rivers; Colvin's, Moore, Long, Horse, Riley's, Turkey, Holly, Skaken, Shelter, Murick's, and Harrison's creeks; Topsail sound; Atlantic ocean. Water: Shallow wells, 15 to 20 feet deep, chief sources domestic supply, wells for the larger demands. Shallow wells yield soft water that is satisfactory. Deeper strata yield less desirable water, in most instances usable. Surface supplies typical of the region, rendered satisfactory by proper treatment. Power: Atlantic Coast Line, 33,000-volt transmission circuit of Tide Water Power and region northwest from Castle Haynes to Atkinson served from a second circuit. Service available to other sections as needed.

Agricultural Products.—Commercial vegetable farming leads in this county where 396 cars were shipped in 1927, 152 of which were strawberries, 98 cucumbers, 63 string beans and 83 other vegetables. There were 2,644 acres of truck besides potato acreage. Peanuts have as large an acreage as cotton, while tobacco takes a relatively low rank. About 7 per cent of the land is in cultivation. With 2,888 tenants on the farms, with about 70 percent of the cultivated land worked by them, and only about three head of work stock to each four tenants.



(Size of map slightly reduced)

County Products	39,609 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	17,149	25	428,725	\$428,725	\$25.00
Cotton	3,160	217	1,435	140,726	44.53
Peanuts	3,186	1,210	3,855,060	192,753	60.50
Tobacco	1,918	800	1,534,400	306,880	160.00
Hay (Including Meadow)	3,979	.6	2,222	49,995	13.50
Horses and Mules*			2,263	252,913	
Cattle*			2,021	95,391	
Hogs*			12,538	146,695	

PERSON COUNTY

In North Piedmont; population, 20,100; area 250,240 acres; topography, rolling, granite hills; waters, Flat river; railroads, N. & W., So.; buslines, Durham-Roxboro line; highways, Nos. 13, 57, 144; incorporated cities and towns, ‡Roxboro.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	8	695	\$402,194	\$1,477,291	\$2,192,103	\$714,812

Forest Products.—The forest area is approximately 150,695 acres, comprising 60 per cent of the total land area. More than 75 per cent of the forest area is farm woodland; including some 12,805 acres of woodland pasture. The principal merchantable species are shortleaf pine 60 per cent, oak 20 per cent, red cedar, poplar and hickory.

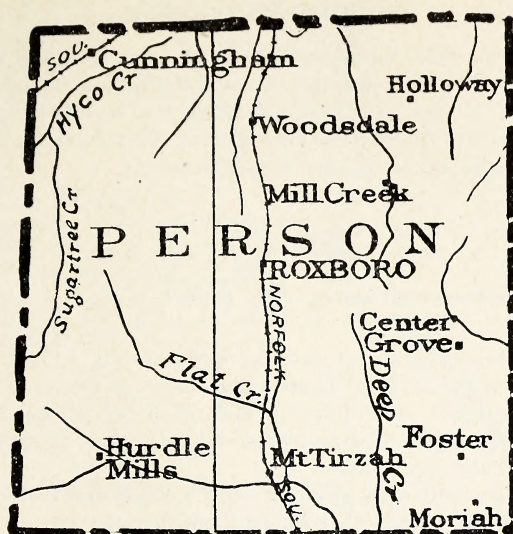
The estimated present total stand of 50,000,000 board feet of saw timber is fairly accessible.

The original hardwood forest still occupies about half the area. Second growth pine is mixed with about 50 per cent of this. The old field pine type come in on abandoned farm land yields chiefly shortleaf pine with a little spruce pine in the north and loblolly pine in the east.

Some 25 sawmills produce about 20,000,000 board feet of lumber per annum. A considerable quantity of veneer logs are cut and probably 75,000 ties. The estimated stumpage value of the timber cut annually approaches \$100,000.

Water Resources and Power.—Waters: Flat and Tar rivers; Sugar, Hyco, Aarons, and Deep creeks. Water: Waters of this county are known to be typical of Piedmont waters and are considered excellent in every respect. No large water courses; creeks of fair size are numerous. Power: Carolina Power traverses three sections of county, offering electric power to every section as needed.

Agricultural Products.—A large percentage of the farm acreage is in tobacco, while needed food and feed crops are inadequate. This is one of the old tobacco counties, with Roxboro as its market. Its soil is stiff and suitable for small grains and grasses. With many undeveloped agricultural possibilities available, together with the good roads established, there is opportunity for considerable improvement and diversification here. More livestock is needed.



County Products	50,671 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	24,861	22	546,942	\$ 497,717	\$20.02
Tobacco	20,241	712	14,411,592	3,747,014	185.00
Wheat	6,637	10	66,370	92,918	14.00
Cow Peas	443	10	4,430	8,196	18.50
Hay (Including Meadow)	3,924	.8	3,078	70,794	18.40
Horses and Mules*			4,181	445,507	
Cattle*			3,556	167,843	
Hogs*			4,836	56,581	

PERQUIMANS COUNTY

In Northeast Coastal; population, 11,200; area, 161,280 acres; topography, fertile, low, sandy, swamps; waters, Perquimans river; Albemarle sound; railroads, N. So.; buslines, McPherson, Habit Bros.; highways, Nos. 321, 342; incorporated cities and towns, Hertford.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	7	318	\$250,704	\$1,199,276	\$1,761,621	\$562,345
Lumber, Cotton Seed products, Fertilizer, leading products.						

Forest Products.—The forest area is approximately 111,617 acres, comprising 69 per cent of the total land area. Some 28 per cent of the forest area is farm woodland, including some 4,379 acres of woodland pasture. The principal merchantable species are loblolly pine 70 per cent, gums 15 per cent and oaks 5 per cent.

The estimated present total stand of 80,000,000 board feet of saw timber is fairly accessible by roads to both rail and water.

White cedar occurred in the swamps of the northern part but this has been logged by two or three large companies. Production has declined greatly in the past few years. Second growth pine is now chief hope of the future.

One large and seven small sawmills produce about 20,000,000 board feet of lumber per annum. Only 8,000,000 of which was cut in the county. A considerable quantity of mine props, piling and veneer logs were also produced. The estimated stumpage value of the timber cut annually is around \$50,000.

Water Products.—Perquimans County is located in the extreme northeastern section of the state. The Perquimans river flows through the county into Albemarle sound. This county ranks with Tyrell and other northeastern counties in the production of food fish, in 1927 having produced 252,500 pounds of shad, herring and other fresh water fish valued at \$25,270.

Water Resources and Power.—Waters: Perquimans, Yeopim, and Little rivers; Sutton's, Gooding's Mill, Burnt Mills, and Yeopim creeks; Gooding's millpond; Albemarle sound. Water: Surface sources abundant, but are little used although proper development would render certain sources entirely satisfactory. Shallow wells chief source of supply, cisterns used to some extent. Power: Transmission circuits Virginia Electric radiate from Winfall, traverse three important sections. The Norfolk Southern railroad is paralleled by electric lines entirely across the county. Extensions of these lines can care for other sections.

Agricultural Products.—Soy beans is one of the principal crops, while peanuts are grown considerably in the western portion of the county. We find a fair diversity of crops, with other important possibilities, such as trucking. The soil is of the Portsmouth, sandy loam type, its topography level, and field operations permit of the most modern machinery. Double



and intertilled crops are quite in vogue. Corn is grown quite extensively and some tobacco is being grown in the southwestern portion. The Albemarle sound tempers the spring weather conditions sufficiently to make truck crops fairly safe from freeze damage. In 1927 approximately 18,000 head of swine were sold.

County Products	48,838 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	17,394	27	469,638	\$413,281	\$23.76
Cotton	11,169	250	5,842	552,866	49.50
Peanuts	9,341	940	8,780,540	439,027	47.00
Soy beans	5,305	16	84,880	105,251	19.84
Hay (Including Meadow)	2,266	1.2	2,720	57,120	25.20
Horses and Mules*			3,865	294,169	
Cattle*			1,552	73,254	
Hogs*			14,511	169,779	

PITT COUNTY

In Central Coastal; population, 51,700; area, 401,280 acres; topography, fertile, low, swamps; waters, Tar, (navigable) river; railroads, A. C. L., N. So.; buslines, Transit, J. E. Mitchell, Southerland Bros., C. & C., G. & O. Company; highways, Nos. 11, 12, 90, 91, 301; incorporated cities and towns, Ayden, Bethel, Farmville, *†Greenville, Grifton, Grimesland, Winterville, Fountain.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added By Manuf.
All Industries	29	492	\$384,516	\$1,595,888	\$2,378,864	\$782,976
Food and Kindred Products	6	35	37,271	136,423	308,165	171,742
Forest Products	8	185	150,577	319,503	551,240	231,737
Printing and Publishing	6	23	28,110	23,943	101,899	77,956
*Miscellaneous Industries	9	249	168,558	1,116,019	1,417,560	301,541

*Includes, Fertilizer, Cotton Seed products, Textile products, Stone and Clay products, etc.

Forest Products.—The forest area is approximately 260,640 acres, comprising 64 per cent of the total land area. More than 41 per cent of the forest area is farm woodland; including some 13,348 acres of woodland pasture. The principal merchantable species are loblolly pine 65 per cent, gum 20 per cent, cypress and oak. The estimated present total stands of 80,000,000 board feet of saw timber is quite accessible.

About 40 per cent of the forest is swamp. Along the streams are large stretches of cut-over cypress swamp and oak lands. The loblolly pine near the streams and further inland has also been cut. There is no longleaf pine of merchantable size. Some 25 sawmills produce about 5,000,000 board feet of timber per annum. About the same quantity of gum timber is cut into veneer and shipped out for package. The estimate stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—Near Greenville clays suitable for brick making are found. Marls are generally distributed throughout this county but the best deposits occur near Hanrahan and between Garnerville and Calico in Clay Root swamp. Analyses show from 27 per cent to 82 per cent calcium carbonate in the marls. Production of minerals in the county for 1926 was \$22,500.

Water Resources and Power.—Waters: Tar river; Tranters, Conetoe, Kitten, Little Contentnea, Contentnea, Swift, and Briery Swamp creeks. Water: Local streams found in practically any section of the county. Tar river, supplying Greenville, can be developed to furnish highly satisfactory supplies, moderate turbidities and color ordinarily necessitate filtration. Shallow wells furnish individual needs, while some deep wells are utilized. Power: The 7,300 h. p. municipal steam plant furnishes power to Greenville. A large number of low voltage transmission lines, of the "rural power" type, radiate out along highways, supply needs of rural inhabitants. There are two other "rural power" lines, one in the east and one in the west, which are supplied with power from other sources. Farmville generates its own power in a 750 h. p. plant.

Agricultural Products.—This is the largest tobacco growing county in the State, and sold for the farmers, last year, 74,000,000 pounds. Almost half of the area is in cultivation, in spite of its being a large county and



the farmers are well located in relation to urban centers. Progressive farming methods are practiced. The extensive use of soy beans, interplanted in corn and of second crops after spring oats, has proven an efficient method in double cropping. The northern area around Bethel is an intensive Irish potato center, of which this county shipped 225 cars in 1927. The soil is of a light, sandy loam, underlaid by a clay sub-soil that makes it ideal for farming and a slightly undulating topography permits of ideal drainage and the use of modern machinery.

County Products	150,560 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Tobacco	50,149	716	35,906,684	\$8,617,604	\$172.00
Corn	48,057	23	1,105,311	950,567	19.78
Cotton	34,767	252	18,329	1,699,689	48.89
Oats	6,668	25	166,700	116,690	17.50
Hay (Including Meadow)	3,857	.9	3,445	72,345	18.90
Horses and Mules*			8,353	941,879	
Cattle*			2,873	135,606	
Hogs*			20,684	242,003	

POLK COUNTY

In South Mountain; population, 9,600; area 160,640 acres; topography, mountainous; waters, Green and North Pacolet rivers; railroads, Southern; buslines, Intercarolinas, Blue Nash Touring Car line; highways, Nos. 19, 191, 192; incorporated cities and towns, Saluda, *Tryon, †Columbus.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	14	399	\$250,434	\$1,085,346	\$1,679,307	\$593,961
Lumber and Textiles chief products.						

Forest Products.—The forest area is approximately 99,128 acres, comprising 62 per cent of the total land area. About one-third of the forest area is farm woodland; including some 5,000 acres of woodland pasture. The principal merchantable species are oaks 20 per cent, pine 50 per cent, poplar 5 per cent.

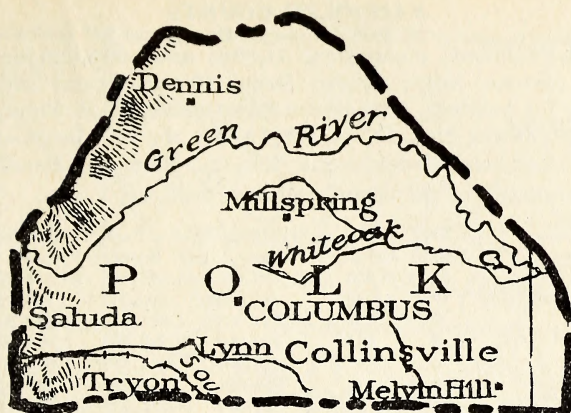
The estimated present total stand of 50,000,000 board feet of saw timber is fairly accessible by roads and rail.

There is little mature commercial timber left in the county. The former considerable stands of chestnut along the slope of the Blue Ridge will soon have been entirely destroyed by the blight.

Some 10 sawmills produce about 10,000,000 board feet of lumber per annum. A considerable quantity of pulpwood and ties are also produced each year. The estimated stumpage value of the timber cut annually is around \$50,000.

Water Resources and Power.—Waters: Green, Broad (short stretch), and North Pacolet rivers; Walnut, Whiteoak, Ostin, Brights, and other creeks; Turner lake on Green river. Water: Surface sources of typical mountain waters numerous; chemical and physical qualities, uniformly excellent. Power: Duke Power, from Turner plant of 8,400 h. p., on Green river, transmission circuits radiate in three directions to serve as many sections: areas not served now can obtain such service when needed.

Agricultural Products.—The travelers of this county's picturesque highways do not see the agricultural area which lies in the eastern portion. It produces considerable fruit in the high mountain portion and cotton in the eastern townships, being the most western cotton county in the State. The cotton and corn acreage divides 88 per cent of the cultivated land. Some of the best grape vineyards in North Carolina are here. There are 500 acres credited to vegetable crops; over 1,000 bee hives; 29,000 hens; 32 tractors and 1,546 hogs sold and slaughtered during 1927.



County Products	28,533 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	12,028	23	276,644	\$282,177	\$23.46
Cotton	8,249	250	4,314	412,450	50.00
Rye	2,032	12	24,384	38,527	18.96
Wheat	1,474	11	16,214	23,510	15.95
Hay (Including Meadow)	1,120	.8	924	22,176	19.20
Horses and Mules*					
Cattle*					
Hogs*					

RANDOLPH COUNTY

In Central Piedmont; population, 31,800; area, 513,920 acres; topography, high plateau, hilly; waters, Deep, Uharie rivers; railroads, So., N. So., A. & Y.; buslines, Greensboro-Fayetteville, High Point, Asheboro, Camel City; highways, Nos. 60, 61, 62, 70, 77, 90, 109; incorporated cities and towns, *Asheboro, Franklinville, Liberty, Ramsuer, Randleman.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	61	2,656	\$1,736,699	\$5,917,489	\$9,545,674	\$3,628,185
Food and Kindred Products	17	35	31,061	499,317	655,577	156,260
Cotton Goods	7	1,151	741,164	1,975,759	3,718,835	1,743,076
Knit goods	5	643	480,305	2,240,833	2,963,502	722,669
Furniture	6	482	275,837	504,143	1,093,209	589,066
Other Forest Products	16	253	156,821	562,030	838,141	276,111
*Miscellaneous Industries	10	92	51,511	135,407	276,410	141,003

*Includes Printing and Publishing, Broom factories, Clay products, etc.

Forest Products.—The forest area is approximately 338,224 acres, comprising 65 per cent of the total land area. More than 66 per cent of the forest area is farm woodland; including some 31,578 acres of woodland pasture. The principal merchantable species are shortleaf pine 65 per cent, oak 20 per cent, red cedar, poplar and spruce pine.

The estimated present total stand of 130,000,000 board feet of saw timber is fairly accessible by roads.

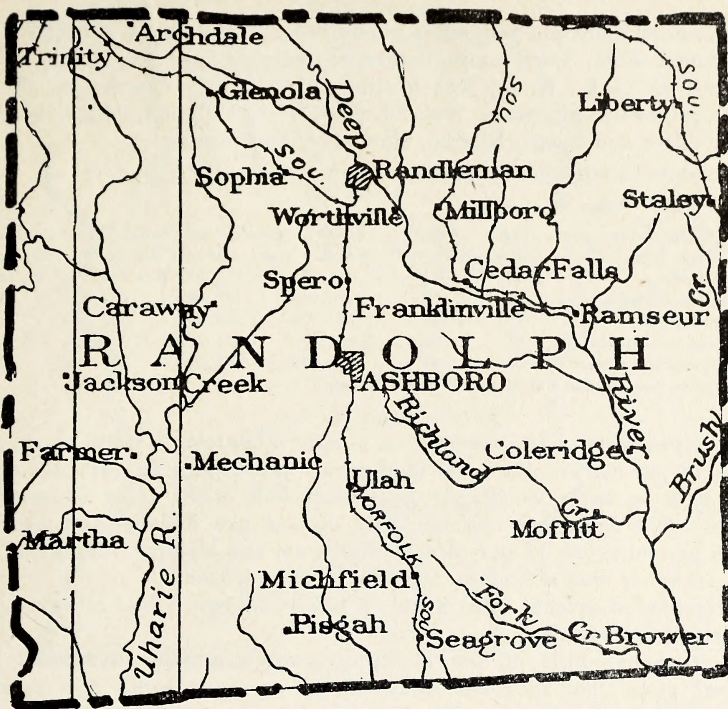
The hardwood forest still occupies more than half the area with a mixture of pine on only one-third of it. Longleaf pine extends into the southeast corner. Nearly all the merchantable red cedar has gone.

Some 30 sawmills produce about 12,000,000 board feet of lumber per annum. Probably 100,000 ties are also cut. The estimated stumpage value of the timber cut annually exceeds \$60,000.

Mineral Products.—Gold, silver and some copper is found distributed over the entire county. A great many of the most important gold mines of the State were located in this county. Brick and tile clays are found along the stream flats. Near Staley a good deposit of pyrophyllite occurs. The total value of the mineral production in the county for 1926 was \$33,000.

Water Resources and Power.—Waters: Deep, Uharie, and Little rivers; Brush, Caraway, Muddy, Jackson, Polecat, Richland, Sandy, Toms, and other creeks. Water: Surface sources of supply, numerous; chemical quality, usually satisfactory; physical quality, good except for moderate amounts of suspended matter and high turbidity of larger streams from storm flows. Power: Northwestern section is furnished with electric service from Duke Power at High Point. The eastern and southern sections are traversed by transmission circuits of Carolina Power. Any amount of power can be had where needed. Three small undeveloped power sites on the Deep river are estimated to have possibilities of not less than 1,300 h. p.

Agricultural Products.—One of the best all around diversified farming counties in North Carolina, it grows enough feed and to spare and enough food to supply its needs. About 21 per cent of the area is in cultivation.



It is not dependent on cotton or tobacco. It is a fine small grains area. It shows 1,072 acres in field truck crops; 1,100 acres in home gardens; 177,000 bearing apple and peach trees; almost 5,000 colonies of bees; 1,806 sows and over 10,000 hogs sold and slaughtered last year. While not developed extensively in livestock, it is naturally suited for feed crops. It is well grained, with an abundance of good water courses. While not a dairying county, it has over 5,000 milch cows.

County Products	128,305 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	37,866	23	870,918	\$757,699	\$20.01
Wheat	30,743	12	368,916	557,063	18.12
Oats	6,902	20	138,040	95,248	13.80
Cow Peas	845	13	10,985	18,345	21.71
Hay (Including Meadow)	8,855	1.1	9,461	205,020	23.84
Horses and Mules*			5,990	647,370	
Cattle*			7,683	362,638	
Hogs*			7,644	89,435	

RICHMOND COUNTY

In Western Coastal, Sandhills; population, 29,500; area 333,440 acres; topography, hilly, low, sandy, swamps; waters, Pee Dee, Little rivers; railroads, A. C. L., N. S., So.; buslines, Queen City Coach Co., Greensboro-Fayetteville; highways, Nos. 20, 50, 51, 75, 170, 204, 512, 515; incorporated cities and towns, Ellerbe, Hamlet, *†Rockingham.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	33	3,341	\$2,611,871	\$6,214,387	\$10,915,158	\$4,700,771
Food and Kindred Products	5	78	75,947	169,669	481,695	312,026
Forest Products	11	244	185,026	343,252	636,560	293,308
Textiles and their products	10	2,756	1,981,279	5,328,721	8,928,929	3,600,208
*Miscellaneous Industries	6	263	369,619	372,745	867,974	495,229

*Includes Printing and Publishing, Railroad Repair Shops, etc.

Forest Products.—The forest area is approximately 247,806 acres, comprising 74 per cent of the total land area. More than 28 per cent of the forest area is farm woodland; including some 7,396 acres of woodland pasture. The principal merchantable species are loblolly and shortleaf pine 75 per cent, oak 15 per cent, poplar, gum and hickory. Longleaf pine which formerly was abundant has nearly disappeared.

The estimated present total stand of 40,000,000 board feet of saw timber is generally accessible.

The Piedmont hills of the northeast corner produce hardwoods and shortleaf pine. The longleaf region of the east and south now produces loblolly and shortleaf pine. All areas are heavily cut over.

Some 30 sawmills produce about 15,000,000 board feet of lumber per annum. Some ties are also cut. The estimated stumpage value of the timber cut annually is around \$50,000.

Water Resources and Power.—Waters: Yadkin (Pee Dee), and Little rivers; Buffalo, Cartledge's, Drowning, Big Mountain, Falling, Hitchcock, Little Mountain, Marks, Mountain, Naked, and other creeks. Water: Numerous surface sources of supply of the Sandhill and Piedmont variety; chemical quality, excellent; physical quality, excellent, except for moderately high turbidities prevailing in larger streams and concurrent with storm flows in smaller ones. Power: High and low voltage transmission circuits of Carolina Power traverse several sections and offer large power service, which can be had elsewhere as needed. Power is now developed from the Yadkin at Blewett's Falls in a 32,150 h. p. plant; upwards of 50,000 additional horsepower can be developed on the Yadkin, it is estimated.

Agricultural Products.—Half of the cultivated area is in cotton, 14,886 bales being ginned last year. This county stands next to Moore in the peach industry, with 493,949 mature peach trees from which were shipped 159 solid cars in 1927. It also shipped 49 cars of dewberries. There is a diversity of soil within its borders, of which about 60 per cent is worked by tenants who used 26,000 tons of commercial fertilizers in 1927.



County Products	81,949 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	40,125	198	16,621	\$1,493,613	\$37.22
Corn	24,123	19	458,337	421,670	17.48
Oats	3,851	20	77,020	60,076	15.60
Cow Peas	1,146	11	12,606	19,413	16.94
Hay (Including Meadow)	1,403	1.0	1,389	31,947	23.00
Horses and Mules*			2,088	231,960	
Cattle*			2,599	122,673	
Hogs*			3,133	36,656	
Truck, Fruit, Watermelons		1,156 Carloads			

ROBESON COUNTY

In Southcentral Coastal; population, 54,674; area, 633,600 acres; topography, fertile, sandy hills, low, swamps; waters, Lumber river; railroads, A. C. L., R. & C., Seaboard, V. & C. So.; buslines, Queen City Coach Co.; highways, Nos. 20, 22, 70, 71, 201, 211; incorporated cities and towns, *Lumberton, Lumber Bridge, Maxton, Orrum, Pembroke, Red Springs, Rowland, St. Pauls.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	38	2,087	\$1,136,800	\$3,862,137	\$6,069,527	\$2,207,390
Forest Products	16	206	108,657	169,730	369,844	200,114
Textiles and their products	6	1,734	884,266	2,446,796	4,018,668	1,571,872
*Miscellaneous Industries	16	147	143,877	1,245,611	1,681,015	435,404

*Includes, Food products, Printing and Publishing, Fertilizer, Cotton Seed products, etc.

Forest Products.—The forest area is approximately 379,520 acres, comprising 60 per cent of the total land area. Less than 17 per cent of the forest area is classified as farm woodland; includes 3,697 acres of woodland pasture. The principal merchantable species are pine 56 per cent, gum 33 per cent, cypress 5 per cent. The estimated present total stand of 230,000,000 board feet of saw timber is fairly accessible by roads and rail.

Though a leading agricultural county the prospects of profitably producing all abundant crops of timber are excellent. Reproduction of loblolly and longleaf pine is abundant. With fire eliminated through aroused public interest rapid growth should be the rule. Some 35 sawmills produce about 25,000,000 board feet of lumber per annum. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—Brick clays are found in the vicinity of Rowland. A low grade sandy marl, carrying about 50 per cent or less of calcium carbonate has been taken from pits near Orrum, Ashpole, Fairmont, Lumberton, Rosenale and Councils. The beds of marl are often thin. Total value of the mineral production in the county for 1926 was \$22,500.

Water Resources and Power.—Waters: Lumber river; Little Marsh, Big Marsh, Big Raft, Little Raft, Richland, Gum, Saddletree, Bear, Buck, Hog, Shoeheel, Ten Mile, and Big Swamp creeks; Warwick bay, Edmunds, Atkin, McMillians, Rozier, Companys, Warwick, McRae, McNeills, Grady, Stewarts, and Atkins ponds. Water: Surface and underground sources ample, generally available over county. Lumber river water used by Lumberton with satisfaction, after filtration. Smaller towns have developed deep well supplies. Shallow wells satisfactory for the individual needs. Power: Transmission circuits Carolina Power available in number of sections, no part greatly distant from transmission line. Extensions to these lines being made as needs justify.

Agricultural Products.—Tobacco, peanuts and trucking interests are developing rapidly in this county where cotton formerly predominated. It shipped 358 solid cars of fruit and vegetables in 1927, watermelons 165, cantaloupes 84, string beans 42 and other vegetables 67 cars. The county sold over 25,000,000 pounds of farmers' tobacco last year. The county has the largest cultivated area in the state. About 45 per cent is in crops. The 50,000 tons of fertilizers used, gave it first rank last year in this respect.



Its 10,500 head of work stock places it as second county in the State in this respect. There were 40,210 bales of cotton ginned in 1927.

County Products	206,705 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	97,888	218	44,643	\$4,203,898	\$ 42.95
Corn	67,866	22	1,493,052	1,313,886	19.36
Tobacco	18,975	751	14,250,225	2,992,547	158.00
Cow Peas	5,079	10	50,790	77,709	15.30
Oats	7,616	19	144,704	115,763	15.20
Hay (Including Meadow)	7,485	1.0	7,627	183,048	24.00
Horses and Mules*			10,100		
Cattle*			4,300		
Hogs*			19,245		

ROCKINGHAM COUNTY

In North Coastal, Piedmont; population, 49,300; area 370,560 acres; topography, rolling, fertile; waters, Dan, Haw, Mayo rivers; railroads, A. & Y., N. & W., Southern; buslines, Royal Blue, Piedmont, Leaksville-Reidsville, Leaksville-Danville, Cox & Foley, Charles Bateman; highways, Nos. 65, 70, 77, 708, 709; incorporated cities and towns, Leaksville, Madison, Mayodan, *Reidsville, Stoneville, †Wentworth.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	38	5,917	\$5,029,817	\$22,576,930	\$69,434,742	\$46,857,812
Textiles and Tobacco products chief industries.						

Forest Products.—The forest area is approximately 215,017 acres, comprising 58 per cent of the total land area. More than 64 per cent of the forest area is farm woodland; including some 13,460 acres of woodland pasture. The principal merchantable species are shortleaf and spruce pine 50 per cent, oak 40 per cent, poplar and hickory.

The estimated present total stand of 100,000,000 board feet of saw timber is fairly accessible by roads and rail.

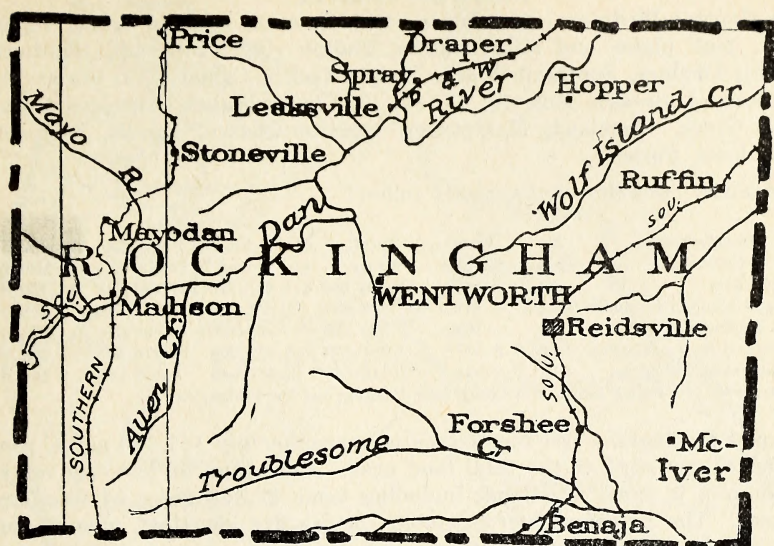
The hardwood and pine and the hardwood without pine, together form more than half the forest. Pine does not come in unless large openings are made. Spruce pine is more abundant than shortleaf in the second-growth pine forests.

Some 12 sawmills are operating in the county producing about 5,000,000 board feet of lumber per annum. A considerable quality of ties and veneer logs, and a little pulpwood are cut. The estimated stumpage value of the timber cut annually is around \$20,000.

Mineral Products.—There is a narrow strip of Triassic shales and clays extending from the Stokes county line near Mayodan in a northeast direction through Leaksville, Spray and Draper to the Virginia line which are suitable for brick and tile manufacture. A six-inch seam of coal and layers of carbonaceous shales occur in this same belt of Triassic material. Granite is found in the vicinity of Stacey. Mineral production in the county for 1926 was \$153,135.

Water Resources and Power.—Waters: Dan, Mayo, and Upper Haw rivers; Troublesome, Wolf, Island, Hogan, Allen, and other creeks. Water: Numerous surface sources of supply capable of furnishing large amounts; chemical and physical qualities are both believed to be excellent except for moderately high turbidities in times of storm flow. Power: Duke Power transmission circuit runs through three sides of county and sections not now served are within easy reach of these lines; 5,000 undeveloped horsepower is estimated to be available on the Dan river.

Agricultural Products.—Located between the two important tobacco markets of Danville, Va., and Winston-Salem, Rockingham county has three local tobacco markets, the largest of which is Reidsville, selling 6,000,000 pounds in 1927. Many farmers have proven that this county is



suitable for livestock production, small grains and even trucking. The cultivated land is fairly evenly distributed between owners and tenants. There were last reported, 2,359 colonies of bees; 4,332 hogs sold and slaughtered; 68,000 hens; 3,641 milch cows and 52 tractors.

County Products	67,571 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	24,499	22	538,978	\$ 528,198	\$ 21.56
Tobacco	18,696	671	12,545,016	2,885,354	154.00
Wheat	11,505	9	103,545	145,998	12.69
Cow Peas	1,068	12	12,816	23,710	21.69
Hay (Including Meadow)	4,419	.8	3,699	73,980	16.00
Horses and Mules*			5,120	662,624	
Cattle*			6,155	290,516	
Hogs*			7,088	82,930	

ROWAN COUNTY

In Central Piedmont; population, 48,400; area, 312,960 acres; topography, high plains and hilly; waters, Yadkin river; railroads, Southern, Yadkin; buslines, Southern Coach, Yadkin Coach, Camel City, Statesville-Salisbury; highways, Nos. 10, 15, 80, 150; incorporated cities and towns, China Grove, Cleveland, E. Spencer, Granite Quarry, Landis, Rockwell. **Salisbury, Spencer.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	64	5,860	\$5,336,668	\$11,813,775	\$21,574,417	\$9,760,642
Food and Kindred Products	21	117	108,668	1,252,564	1,811,514	558,950
Forest Products	13	162	129,229	355,468	634,110	278,642
Textiles and their products	14	3,527	2,381,172	6,638,098	11,974,845	5,336,747
*Miscellaneous Industries	16	2,054	2,717,599	3,567,645	7,153,948	3,567,645

*Includes Car Repair Shops, Foundries, Gas, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 147,650 acres, comprising 47 per cent of the total land area. More than 66 per cent of the forest area is farm woodland; including some 23,850 acres of woodland pasture. The principal merchantable species are shortleaf pine 55 per cent, oak 35 per cent, others 10 per cent.

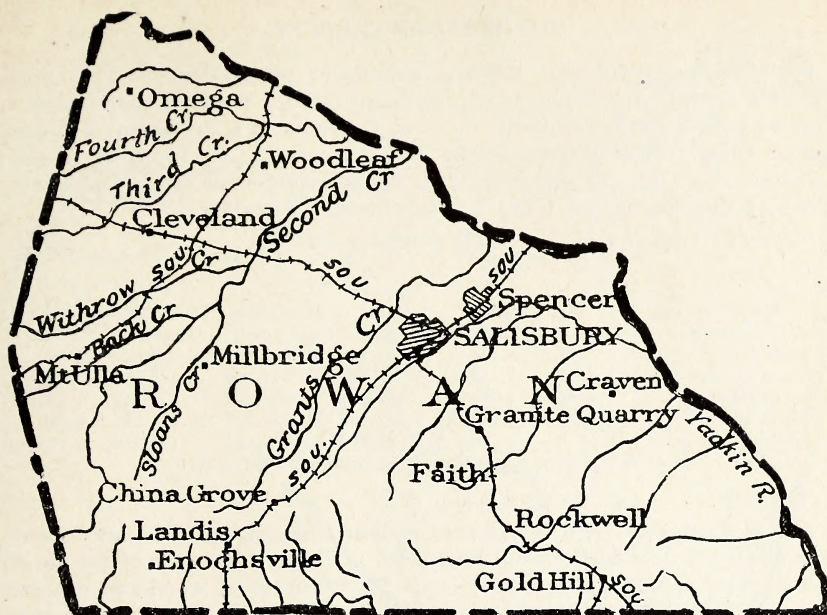
The estimated present total stand of 110,000,000 board feet of saw timber is accessible mostly by roads.

Probably 80 per cent of the forest is still in the original stand of hardwoods or pine mixed with hardwoods. Though heavily cut over, the oaks, hickories, etc., persist. The southern part contains little pine and is characterized by post oak.

Some 20 sawmills produce about 5,000,000 board feet of lumber per annum. Some veneer logs and perhaps 75,000 ties are also cut. The estimated stumpage value of the timber cut annually is around \$35,000.

Mineral Products.—One-half mile south of Salisbury there is an area of swamp land underlaid by a 6-foot layer of very plastic clay, suitable for brick manufacture. In the southeastern part of the county are the Gold Hill copper mines. The ore, copper pyrite, averages from 2 per cent to 4 per cent copper. In this same area gold ores are found. One of the principal and most important granite areas of the state occurs near Salisbury. The area marks a nearly continuous ridge beginning about four miles east of Salisbury and extending southwestward for a distance of 12 miles. Another area is in the vicinity of Woodleaf about 11 miles northwest of Salisbury. The most important producing areas are Dunn's mountain, Granite Quarry, Faith and Powlers mountain. Total value of the mineral production in the county for 1926 was \$1,067,424.

Water Resources and Power.—Waters: Yadkin and South Yadkin rivers; Back, Dutch, Crane, Fourth, Grants, North Second, Town, South Second, Third, Withrow, and other creeks; High Rock lake. Water: Surface sources of supply numerous; chemical quality, generally excellent; physical quality, usually excellent but moderately high turbidities prevail in larger streams. Power: Duke Power transmission circuits radiating from vicinity of Salisbury with other circuits crossing corners of county. The



100,000 h.p. Buck steam plant located northeast of Salisbury on the Yadkin river. A 44,100 h. p. development of the Yadkin river by the Tallasee Power Company is located at High Rock, partly in Davidson county.

Agricultural Products.—There is probably a larger proportion of Rowan county under cultivation than any other county in the state and it has a well-balanced agricultural diversification. Wheat and livestock are very important here. A study of the crops below is interesting in this respect. Here we find the largest number of active tractors in North Carolina, with 560 reported last year. They report over 6,000 dairy cattle; 170,000 hens, over 8,000 hogs last year; considerable interest in bees, field and home truck, as well as fruit.

County Products	124,917 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Wheat	30,412	13	395,356	\$ 557,452	\$18.33
Corn	29,795	25	744,875	962,939	22.25
Cotton	26,613	257	14,309	1,381,587	51.91
Oats	10,205	21	214,305	150,014	14.70
Hay (Including Meadow)	15,377	.9	14,374	330,602	20.70
Horses and Mules*			6,029	630,283	
Cattle*			8,310	392,232	
Hogs*			6,948	81,292	

RUTHERFORD COUNTY

In Western Piedmount, Eastern Mountain; population, 33,500; area, 348,160 acres; topography, high, rolling, fertile, western mountainous; waters; Broad river; railroads, C. C. & O., Seaboard, Southern; buslines, Queen City, Intercarolinas, Motor Transportation Co., Hamrick & Co.; highways, Nos. 19, 20, 120, 181, 192, 207; incorporatel cities and towns, Bostic, Ellenboro, Forest City, *‡Rutherfordton, Spindale.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	37	4,193	\$3,080,584	\$9,652,832	\$16,349,311	\$6,696,479
Food and Kindred Products	7	49	49,318	236,896	434,488	197,592
Forest Products	10	86	52,841	209,128	319,052	109,924
Textile Products	14	4,028	2,948,672	9,086,275	15,414,385	6,328,110
*Miscellaneous	6	30	29,753	120,533	181,386	60,853

*Includes, Cotton Seed products, Clay products, Printing and Publishing, etc.

Forest Products.—The forest area is approximately 232,971 acres, comprising 66 per cent of the total land area. Fifty-two per cent of the forest area is farm woodland; including some 25,128 acres of woodland pasture, The principal merchantable species are pine 70 per cent, oak 20 per cent, and poplar 6 per cent.

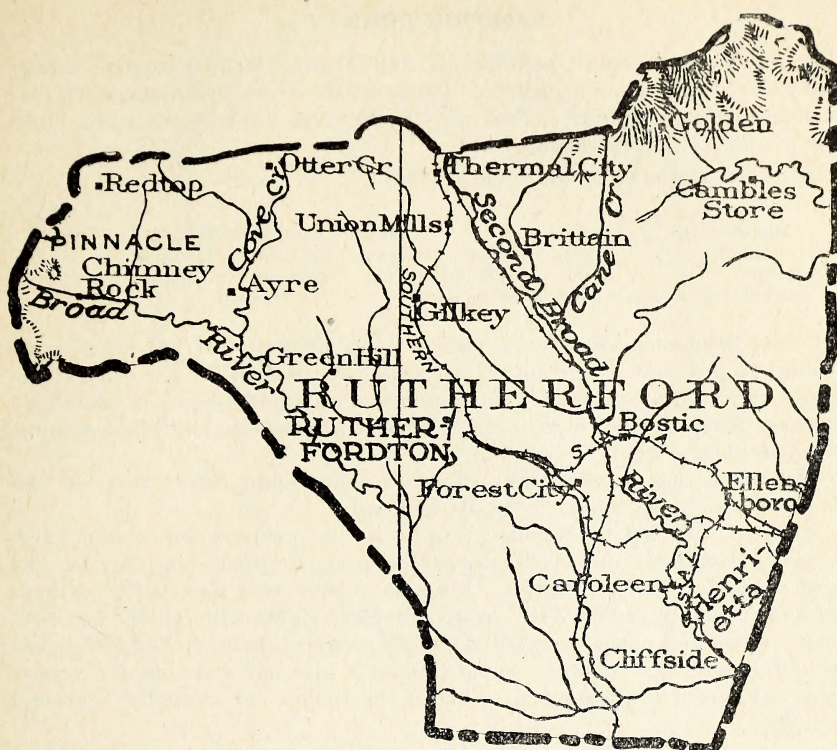
The estimated present total stand of 280,000,000 board feet of saw timber is fairly accessible by roads and rail.

The typical mountain type of forest, containing chestnut, red and chestnut oaks, and other species, occupies the upper slopes and coves of the Blue Ridge in the western part. Practically 90 per cent is of the Plateau type, common to the Piedmont, containing a mixture of oak and yellow pine. Abandoned farm lands here usually reforest naturally to pure second growth pine.

Some 20 sawmills produce about 4,500,000 board feet of lumber per annum. The estimated stumpage value of the timber cut annually is around \$25,000.

Water Resources and Power.—Waters: Broad, First Broad, and Second Broad rivers; Cane, Cove and other creeks; Lake Lure on Broad river. Water: Surface sources of supply, numerous; chemical and physical qualities, considered excellent. Power: In southern half of county from Duke Power transmission lines fed from hydro-plant at Lake Lure. The undeveloped power on the Broad rivers is roughly estimated to be 10,000 h. p.

Agricultural Products.—The average person sees only the picturesque side of this county yet it stands high in corn, and cotton. As with other cotton counties the per cent of tenants is large, there being 1,527 reported. More than 66,000 apple trees of bearing age, 75,000 peach trees, 970 equivalent acres in vegetables, 3,294 colonies of bees, 67,000 hens, 99 tractors and over 10,000 tons of commercial fertilizer used, were reported in 1927. The county's yield of cotton was relatively high.



County Products	75,613 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	30,175	21	633,675	\$ 582,981	\$17.57
Cotton	25,034	254	13,303	1,252,651	50.04
Wheat	7,720	11	84,920	126,531	16.39
Oats	3,247	15	48,705	34,581	10.65
Cow Peas	1,266	10	12,660	18,357	14.50
Horses and Mules*			4,665	529,823	
Cattle*			6,633	313,078	
Hogs*			5,624	65,801	

SAMPSON COUNTY

In Southwest Coastal; population, 40,000; area, 567,040 acres; topography, low, fertile, sandy; waters, South, Black rivers; railroads, A. C. L.; buslines, Safety; highways, Nos. 23, 24, 60, 102, 220; incorporated cities and towns, *Clinton, Roseboro.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	21	475	\$261,190	\$463,838	\$1,012,379	\$548,541

Lumber is the leading industry of the county.

Forest Products.—The forest area is approximately 391,144 acres, comprising 69 per cent of the total land area. More than 36 per cent of the forest area is farm woodland; including some 12,330 acres of woodland pasture. The principal merchantable species are loblolly and longleaf pine, 65 per cent, and gum, 29 per cent.

The estimated present total stand of 90,000,000 board feet of saw timber is fairly accessible by roads and rail.

Much of the best pine timber has been cut and now the swamp hardwoods, particularly the black and sweet gum, constitute the largest and most valuable stands of timber. Fires have been very destructive of both old and second growth. With these controlled yields will rapidly increase.

One large and some 23 small sawmills produce about 25,000,000 board feet of lumber per annum. Some timber is also cut and sold for veneer logs. The estimated stumpage value of the timber cut annually is around \$80,000.

Mineral Products.—In the southwestern part of this county, in the vicinity of Garland, sand and gravel suitable for road material is found. Near Roseboro some clays suitable for brick manufacture occur. Marl deposits extend from the headwaters of Six Runs, south to Lissa and Taylor's Bridge and westward beyond Clinton to Great Coharie creek. Near Newton Grove a small deposit also occurs. Analysis show from 26 per cent to 75 per cent calcium carbonate. Mineral production in the county for 1926 was \$10,725.

Water Resources and Power.—Waters: Black and South rivers; Little Coharie, Great Coharie, Six Runs, and Mingo Swamp creeks. Water: Underground waters utilized chiefly but numerous surface sources available. Underground supplies vary greatly in quality, but as a rule water is available everywhere. Available data indicates that, with proper treatment, surface supplies could be rendered entirely satisfactory. Power: Carolina Power in the central section; vicinity of Garland and Turkey, from system Tide Water Power Company.

Agricultural Products.—This is one of the largest counties in North Carolina, with about 20 per cent of the area in cultivation. In the northern end is an intensive cotton farming area, while the southern portion is little cultivated, and the eastern border has considerable trucking area. This was formerly known as the huckleberry paradise of the state, many carloads shipped annually until the forest fires destroyed most of the plants. Most



(Size of map slightly reduced)

of the farming is done under the ownership operation. The county shipped 97 cars of truck during the last season. 23,271 hogs were sold and slaughtered last year. Cotton is important with 29,186 bales ginned in 1927. More than 4,000 colonies of bees are here.

County Products	143,470 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	62,780	232	30,471	\$2,796,472	\$ 44.54
Tobacco	9,360	742	6,945,120	1,458,475	156.00
Corn	52,565	22	1,156,430	1,075,480	20.46
Oats	3,247	17	55,199	44,159	13.60
Hay (Including Meadow)	4,806	.8	3,607	81,158	18.00
Horses and Mules*			7,634	870,366	
Cattle*			4,911	231,799	
Hogs*			25,202	294,863	

SCOTLAND COUNTY

In Southwest Coastal, Sandhills; population, 15,800; area, 223,360 acres; topography, low and sandhills; waters, Lumber river; railroads, A. C. L., Seaboard; buslines, Queen City; highways, Nos. 20, 24, 203; incorporated cities and towns, East Laurinburg, *†Laurinburg, Wagram.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	21	1,004	\$691,370	\$3,489,575	\$5,129,979	\$1,640,404
Textiles and their products	5	844	558,758	1,911,898	3,169,023	1,257,125
*Miscellaneous	16	160	132,612	1,577,677	1,960,956	383,279

*Includes Cotton Seed products, Fertilizer, Food products, Lumber, etc.

Forest Products.—The forest area is approximately 140,338 acres, comprising 63 per cent of the total land area. Less than 16 per cent of the forest area is farm woodland; including some 1,022 acres of woodland pasture. The principal merchantable species are loblolly longleaf pine 80 per cent, gum 7 per cent, cypress 5 per cent, and poplar 3 per cent.

The estimated present total stand of 50,000,000 board feet of saw timber is mostly accessible by roads and rail.

One of the best stands of old-growth longleaf pine remaining in the state is located three miles south of Laurinburg. It has been protected from exploitation and from fire by its owner.

Some eight small sawmills produce about 7,000,000 board feet of lumber per annum. Some veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$30,000.

Mineral Products.—In the vicinity of Gibson, near the South Carolina line sand and gravel occur which are suitable for construction work.

Water Resources and Power.—Waters: Lumber river; Shoe Heel, Jordan's, Juniper, Gum Swamp, Joes, Bridge, Leiths, and other creeks; Monroe's Mill, Johnson's Mill, Lee's Mill, McNain's Mill, Fairley's Mill, Richmond Cotton, Springfield Cotton, Gwinn's Mill, Covington's Mill, Lytch's Mill, McRae Mill, John's Mill, Gibson's Mill, and other small ponds; underground sources. Water: Numerous sources of supply of the Piedmont-Sandhill variety; little specific data available, but chemical and physical qualities of these waters should be good. Considerable areas swampy and color of many of the waters moderately high. The underground supplies are largely drawn from shallow wells and are of surface character. Power: Greater part of county is served by group of Carolina Power transmission circuits, other sections are within easy reach.

Agricultural Products.—This county is noted for its culture of cotton and cantaloupes. Cotton occupied 61 per cent of the cultivated area. In 1927, 387 cars of cantaloupes were shipped. Watermelons numbered 419 cars and other vegetables 35 cars. Peaches and dewberries are grown in the western portion, while the melons occupy the southern portion, where the soil is naturally fertile and is easily worked. More than 74 per cent of the land is cultivated by tenants. The Sand Hills country extends across its northern and western portions, this land being devoid of natural soil fertility. The ginning report showed 25,450 bales for the past season.



County Products	82,475 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	50,193	211	22,156	\$2,086,372	\$41.57
Corn	20,544	20	410,880	365,683	17.80
Oats	5,047	21	105,987	79,490	15.75
Cow Peas	1,222	13	15,886	23,035	18.85
Watermelons	2,697	359	968 Cars	144,232	53.47
Horses and Mules*			3,106	356,878	
Cattle*			1,286	60,699	
Hogs*			3,014	35,264	

STANLY COUNTY

In South-Central Piedmont; population, 32,500; area 266,240 acres; topography, high, rolling, fertile; waters, Yadkin, Rocky rivers; railroads, N. & W., Southern, W. & S.; buslines, Concord & Albemarle, Albemarle-Salisbury, Central, Safety; highways, Nos. 27, 62, 74, 80; incorporated cities and towns, *†Albemarle, New London, Norwood, Oakboro.

Industrial statistics of the county follow:

Cannot publish statistics for this county without disclosing operation of an establishment. One of the largest Aluminum reduction plants in the world is located in this county; other industries include: large Cotton Mills, Knitting and Knit Goods Mills and Flour Mills.

Forest Products.—The forest area is approximately 150,617 acres, comprising 57 per cent of the total land area. More than 56 per cent of the forest area is farm woodland; including some 15,283 acres of woodland pasture. The principal merchantable species are shortleaf pine 75 per cent, oak 25 per cent.

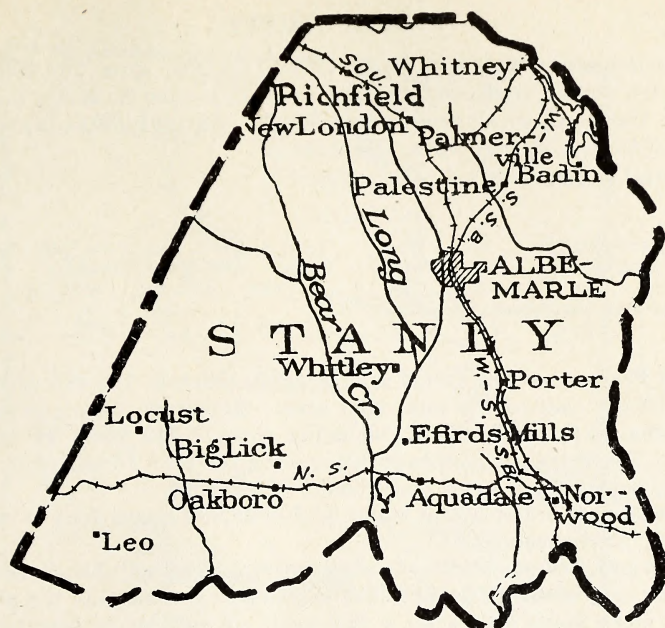
The estimated present total stand of 70,000,000 board feet of saw timber is fairly accessible.

Nearly half the forest is the original hardwoods and pine of the Piedmont changed through heavy cutting, but oak, hickory, etc., still predominating. Some three million feet of oak is cut into cross ties.

Some 40 sawmills produce about 10,000,000 board feet of lumber per annum. The estimated stumpage value of the timber cut annually is around \$65,000.

Mineral Products.—Low grade copper ore occurs in a narrow strip in the northwestern part of the county. Gold has been found at several places but especially in a locality about 3 miles east of Albemarle. This county has many deposits of brick and tile shales which are distributed throughout the county, some important locations being in the vicinity of New London, Whitney and Norwood. Brick produced from these shales are shipped to many parts of this state as well as to South Carolina. Production of mineral products in the county for 1926 was \$203,630.

Water Resources and Power.—Waters: Yadkin (Pee Dee), and Rocky rivers; Mountain, Hardy, Little Bear, Big Bear, Long Island, and other creeks; Tallassee and Norwood Station lakes on the Yadkin river. Water: Smaller streams excellent chemical quality and good physical quality, except for high turbidities concurrent with storm flows. Larger stream water excellent chemical quality, prevailing turbidities high, as is also the suspended matter. Power: Trunk line transmission circuits of Duke Power radiate from Albemarle from which ample power can be had in any part of the county. A lower voltage line serves the southeast section. The Tallassee Power has two developments on Yadkin, total installed capacity 136,900 h.p., the output being largely used in production of aluminum at Badin; some power sold to public utilities for resale. Near Norwood, on Yadkin, the Carolina Power has a generating plant of 25,600 h.p. capacity.



Agricultural Products.—This county has a varied soil type which responds well to improved farming methods. Wheat is the outstanding crop, but this is also one of the most intensive oat areas in North Carolina. Its good diversification is observed in the table below. About 250 tractors and about 4,600 head of work stock were reported in 1927. About one-third of the area is in cultivation. With 959 sows, they were able to dispose of 10,071 hogs last year. About 65 per cent of the land is worked by the owners, while 1,233 tenants resided on farms.

County Products	81,314 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	23,507	20	470,140	\$418,425	\$17.80
Wheat	22,174	10	221,740	319,306	14.40
Cotton	18,180	237	9,014	853,115	46.93
Oats	8,325	19	158,175	107,559	12.92
Hay (Including Meadow)	4,979	1.0	4,857	106,854	22.00
Horses and Mules*			4,468	492,268	
Cattle*			5,282	249,310	
Hogs*			4,940	57,798	

STOKES COUNTY

In Northwestern Piedmont; population, 20,900; area 307,200 acres; topography, rolling, high; waters, Dan river; railroads, N. & W., Southern; buslines, Camel City; highways, Nos. 66, 77, 89, 661, 891; incorporated cities and towns, Walnut Cove, ‡Danbury.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	11	107	\$91,047	\$157,381	\$513,554	\$356,173

Clay products and Lumber chief products.

Forest Products.—The forest area is approximately 180,483 acres, comprising 59 per cent of the total land area. More than 66 per cent of the forest area is farm woodland, including some 9,249 acres of woodland pasture. The principal merchantable species are pine 75 per cent, oak 20 per cent, poplar 2 per cent, and hickory 3 per cent.

The estimated present total stand of 80,000,000 board feet of saw timber is only fairly accessible.

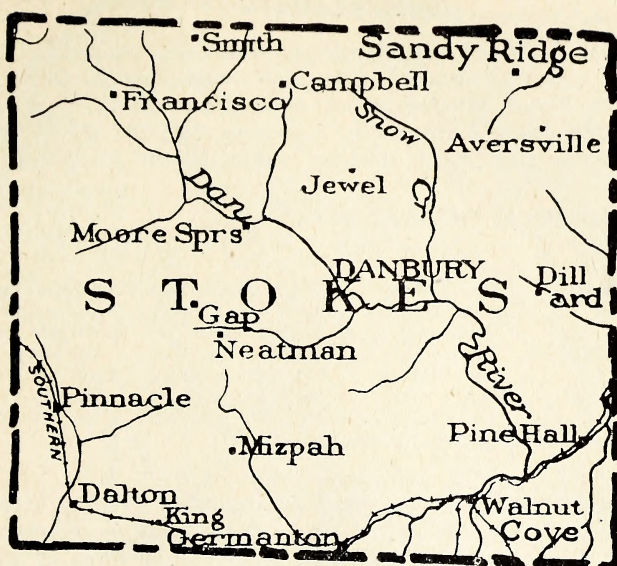
The old practice of planting tobacco on "new ground" has caused much land to be cleared which should have remained in woods and the abandonment of much steep land after a few years of cultivation because of excessive erosion. Much of this land is now slowly reverting to forest.

Some 8 sawmills produce about 4,000,000 board feet of lumber per annum. Very little timber is marketed in any other form with the exception of cordwood for fuel. The estimated stumpage value of the timber cut annually is around \$20,000.

Mineral Products.—In the southeastern part of the county, in a narrow strip of the Triassic sandstone area, clays occur suitable for brick and tile, the belt extending through Germanton, Walnut Cove and Pine Hall. In this same area are also seams (6-inch) of coal, as well as high carbonaceous shales. Near Germanton, is a bed of limestone, of a high calcium carbonate content, 40 to 50 feet thick, which was quarried and burned into lime prior to the Civil War. Sandstone also occurs in the same Triassic belt. In the northwestern part of the county mica has been found at the Hoe Hawkins and Mine Hole mines. Mineral production in the county for cut annually is around \$20,000.

Water Resources and Power.—Waters: Dan and Little Dan rivers; Elk, Peters, Big, North Double, South Double, Snow, Muck, Town Fork, and other creeks. Water: Sources of supply numerous, mountain stream type; chemical qualities, excellent; physical qualities, excellent except for moderately high turbidities of larger streams concurrent with storm flows. Power: Southeastern section served by Duke Power, extended whenever the demand justifies. The Dan River, it is estimated, can be developed for, roughly, 4,000 h.p.

Agricultural Products.—Located in the rolling, foot-hills, fruits, small grains and tobacco abound in this county. About 23 per cent of the acreage is in cultivation, tobacco occupying 28 per cent of the total. They



reported 179 active tractors; 73,000 hens; 3,863 milch cows and 603 sows, and 5,315 hogs disposed of in 1927. Quite a diversified cropping and livestock program is readily applicable here.

County Products	70,668 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	21,722	23	499,606	\$ 489,614	\$ 22.54
Tobacco	20,478	630	12,901,140	2,838,251	139.00
Wheat	13,997	9	125,973	185,180	13.23
Oats	1,379	20	27,580	21,237	15.40
Hay (Including Meadow)	3,503	.8	2,759	61,498	17.83
Horses and Mules*			4,425	492,047	
Cattle*			4,846	228,731	
Hogs*			5,821	68,106	

SURRY COUNTY

In Northwest Piedmont and Northeast Mountain; population, 34,300; area, 332,800 acres; topography, east, high; west, mountainous; waters, Yadkin, Ararat, Fisher, Mitchell rivers; railroads, Southern, A. & V.; bus-lines, Camel City, Elkin & Alleghany; highways, Nos. 26, 66, 80, 89, 268; incorporated cities and towns, †Dobson, Elkin, Mount Airy, Pilot Mountain.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	45	2,875	\$2,388,665	\$4,620,484	\$8,890,227	\$4,269,743
Food and Kindred Products	13	37	23,549	223,504	322,390	98,886
Furniture	8	1,124	830,911	1,537,868	3,255,901	1,718,033
Other Forest products	10	143	96,934	214,474	423,633	209,159
*Miscellaneous	14	1,571	1,437,271	2,644,638	4,888,303	2,243,665

*Includes, Stone and Clay products, Textiles, Leather, etc.

Forest Products.—The forest area is approximately 191,620 acres, comprising 57 per cent of the total land area. More than 74 per cent of the forest area is farm woodland; including some 18,424 acres of woodland pasture. The principal merchantable species are pine 50 per cent, oaks 40 per cent, poplar 5 per cent.

The estimated present total stand of 95,000,000 board feet of saw timber is fairly accessible by state and county roads.

The eastern slope of the Blue Ridge along the western border supports the largest areas of original hardwood forest; much of this, however, has been cut, more or less.

Some 40 sawmills produce about 3,000,000 board feet of lumber per annum. Some pulpwood and ties are also produced. The estimated stumpage value of the timber cut annually is less than \$16,000.

Mineral Products.—In the western part of the county very good manganese ore occurs, but on account of the lack of transportation facilities, it is not worked at present. About three miles to the west of Mount Airy brick clays are found and near there are the principal outcrops of granite in this county. The granite outcrops in flat surface exposures immediately to the north and south of the town of Mount Airy, and is exposed in places within the town limits. Today this section is one of the most active granite quarrying centers of the United States. Total value of the mineral production in the county for 1926, was \$843,000.

Water Resources and Power.—Waters: Ararat, Fisher, Mitchell, and Yadkin rivers; Toms, Lovels, Fauthner's, Rutledge, Bull Run, Snows, Kings, and other creeks. Water: Considered of uniformly excellent chemical and physical quality except for moderately high turbidities in the larger streams following storm flows. Power: Transmission circuit Duke Power extending southeast from 1,000 h. p. at Mount Airy, and from another circuit approximately paralleling southern border of county. Extensions to other sections of county can be provided as needed. Approximately 23,000 of undeveloped hydro-electric horsepower is available.



Agricultural Products.—Fruit, tobacco, corn and wheat occupy prominence in this county. Considerable truck is also shipped by rail from Mount Airy and Elkin, besides a large amount carried from other points by automobile trucks. This county forms the western border of the "old Bright Leaf" tobacco belt for which an important market is located at Mount Airy. It is suitable for livestock growing as its soils produce good pasture; 4,952 milch cows; 72,798 hens were reported while 4,701 hogs were sold or slaughtered during 1927. It has two lines of railroad transportation. One hundred and four farm tractors are used in the county.

County Products	83,268	Yield	Production	Value	Value
	Acreage	Per Acre	or *Number	Total	Per Acre
Corn (For grain)	34,619	22	761,618	\$ 731,153	\$ 21.12
Tobacco	19,084	705	13,454,220	2,959,928	155.00
Wheat	14,313	9	128,817	188,073	13.14
Rye	3,923	12	47,076	68,260	17.40
Apples (Trees)	182,252		247,065	415,069	
Horses and Mules*			4,990	553,522	
Cattle*			7,344	346,637	
Hogs*			6,652	77,828	

SWAIN COUNTY

In Northwest Mountain; population, 15,100; area, 353,920 acres; topography, high, mountainous, fertile valleys; waters, Tennessee, Tuckaseegee, Nantahala, Oconalufly, rivers; railroads, Southern, A. R.; buslines, Independent Touring Car Line, R. R. Ammons, T. W. Angle; highways, Nos. 10, 107, 286, 288; incorporated cities and towns, *†Bryson City, Whittier.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	7	587	\$514,097	\$396,554	\$1,254,115	\$857,561

Production of lumber and wood products chief industries.

Forest Products.—The forest area is approximately 313,189 acres, comprising 89 per cent of the total land area. About 22 per cent of the forest area is farm woodland; including some 16,000 acres of woodland pasture. Of the forest land outside of farms, some 75 per cent is held in large timber tracts. The principal merchantable species are chestnut 25 per cent, spruce 25 per cent, oaks 20 per cent, hemlock 10 per cent.

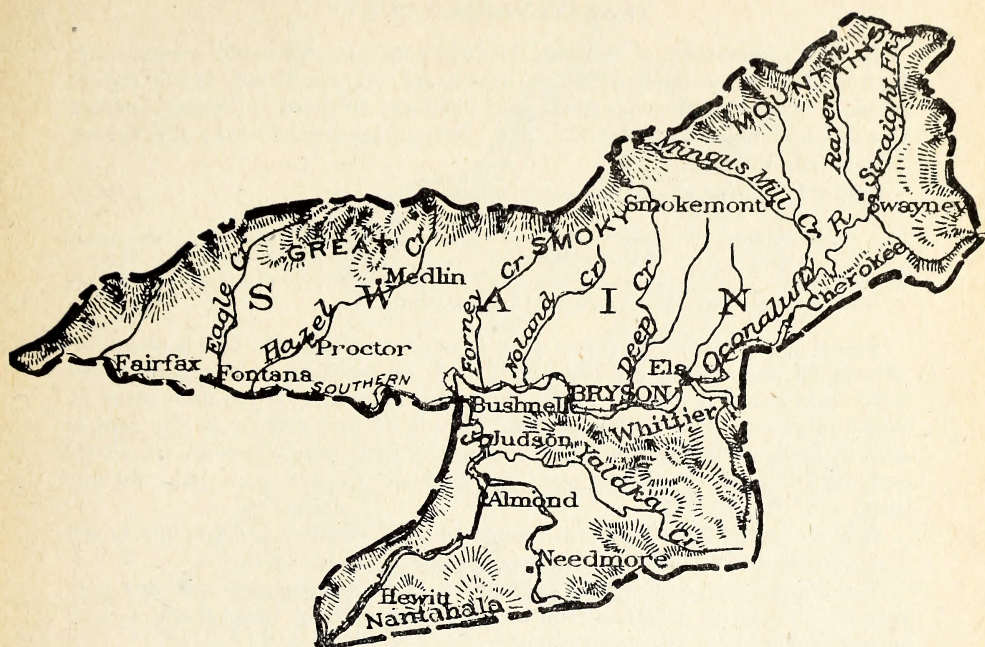
The estimated present total stand of 625,000,000 board feet of saw timber is rather inaccessible by established roads and railroads.

This county contains the southern limit of the northern spruce forest and the last remaining stand of any size in North Carolina. It is planned to preserve and perpetuate this interesting forest area by the proposed Great Smoky Mountains National Park.

Two large sawmills produce nearly 20,000,000 board feet of lumber per annum. A considerable quantity of pulpwood, ties and poles are also produced each year. The estimated stumpage value of the timber cut annually is around \$200,000.

Mineral Products.—The most important copper deposit in the state, extending about 30 miles in this county near Fontana, was opened in 1925. The ore is chalcoppyrite of very high grade. Other prospect openings have been made on Hazel creek, Forney creek, and near Smokemont. Along the Murphy Branch railroad, marble and limestone about 600 feet thick forms a continuous belt from a mile south of Nantahala station to a point three-quarters of a mile northeast of Hewitts station. The color is from gray to black and from cream white to pink, and the composition is from 50 per cent to 98 per cent calcium carbonate and from naught to 42 per cent magnesium carbonate. Kaolin clays are found in a narrow belt extending from Sharptop in a southwest direction to within a few miles of Almond. Just north and to the southwest of Bryson City several pits in the past, have produced clay. About 2 miles west of Bryson City, in a cut on the Murphy-Asheville branch of the Southern Railway a medium coarse-textured gray biotite granite-gneiss occurs. The mineral production in the county for 1926 was \$177,451.

Water Resources and Power.—Waters: Little Tennessee, Nantahala, Tuckasegee and Oconalufly, rivers; Hazel, Eagle, Forney, Yalaka, Connelly, Deep, and other creeks; Cheoah lake on Little Tennessee river. Water:



Uniformly of excellent chemical and physical quality; notable, even, as pure mountain water. Power: Hydro-electric plant of 96,000 h.p. owned by Tallassee Power located on Little Tennessee river, output is used, at present, in Tennessee. Bryson City develops 500 h.p. from the Oconalufy river. Undeveloped hydro power 19,000 h. p. estimated to be available awaits only active need.

Agricultural Products.—This is a typical mountain county. Good roads and transportation are awakening the natives to its opportunities. The soil is naturally fertile, offering good native grasses for hay or grazing. Fruit grows abundantly, as evidenced by its 80,000 trees of bearing age. Only a small part of the county is in cultivation principally in the southern portion through which the railroad and main highway passes. Corn is the largest crop with some hays, 42,000 apple and 37,000 peach trees of bearing age, 359 acres in home gardens and 1,526 bee hives, were reported.

County Products	13,809 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	9,670	25	241,750	\$236,915	\$24.50
Oats	776	17	13,192	9,894	12.75
Rye	617	11	6,787	8,823	14.30
Irish Potatoes	513	81	41,553	48,617	95.00
Hay (Including Meadow)	1,668	1.0	1,714	35,994	21.00
Horses and Mules*					
Cattle*					
Hogs*					

TRANSYLVANIA COUNTY

In South Mountain; population, 10,700; area 242,560 acres; topography, high, fertile, mountainous; water, Davidson, French Broad, Little rivers; lakes, Toxaway; railroads, Southern; buslines, Brevard, Interstate Scenic Coach Line; highways, Nos. 28, 283, 284; incorporated cities and towns, *‡Brevard, Rosman.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	12	806	\$665,560	\$2,238,552	\$3,552,881	\$1,314,329

Chief industries are Lumber, Leather and Tanning Extract.

Forest Products.—The forest area is approximately 204,382 acres, comprising 84 per cent of the total land area. More than 24 per cent of the total land area, is farm woodlands; which includes some 7,000 acres of woodland pasture. Of the forest land outside of farms some 80 per cent is held in large timber tracts. The principal merchantable species are chestnut 30 per cent, poplar 10 per cent, hemlock 10 per cent, oaks 30 per cent.

It is estimated that there still remains a total stand of 150,000,000 board feet of saw timber which is fairly accessible by roads or rail.

The Pisgah National Forest includes a large area in the northern portion of the county, practically all of which was more or less cutover before it was acquired by the government.

Some 20 sawmills produce about 25,000,000 board feet of lumber per annum. Most of the logs from which this lumber is manufactured are cut in Jackson and Henderson counties. There is also a considerable quantity of pulpwood, ties and poles produced each year. The estimated stumpage value of the timber cut annually is around \$160,000. Three plants consume much of the acid wood and bark production. These and other established industries consume the entire production and new industries for utilizing small sizes could well be established.

Mineral Products.—Near Brevard there is a very high grade manganese ore running as high as 58 per cent manganese. Beginning at Lake Toxaway and extending in a southwestern direction through Jackson and Macon counties there are large bosses of residuals of granite. Great Hog Back mountain is one of these large exposures of granite.

Water Resources and Power.—Waters: French Broad, Davidson, South Fork Mills, and Little rivers; Avery, Cathey, Carson, Toxaway, Horsepasture, headwater forks of French Broad river, and other creeks. Water: Surface sources of supply of typical mountain character, numerous of both large and small magnitude; chemical quality, naturally excellent in all ways; one or two streams receiving small amounts of industrial wastes; physical qualities uniformly excellent, except where wastes are found, and in larger streams, moderately high turbidities concurrent with flood flows. Power: Cascade Power Company, Brevard has developed Little River, installed capacity 1,250 H.h. The high voltage lines of Duke Power and Carolina Power are to be interconnected giving the county power for all needs.



Agricultural Products.—The automobile roads have made Brevard, an attractive summer resort, and its valley, throughout its length, produces abundant crops. Only a small portion of the county's area is in cultivation, with latent agricultural opportunities, 68 per cent is in corn. It shows over 500 acres in home gardens; over 3,000 head of hogs sold and slaughtered in 1927; 23,000 hens of laying age; 768 ewe sheep, and 31 tractors in use.

County Products	13,834 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	8,518	25	212,950	\$204,432	\$24.00
Rye	2,134	11	23,474	32,394	15.18
Irish Potatoes	470	85	39,950	39,950	78.00
Hay (Including Meadow)	2,150	.8	1,763	40,549	18.40
Horses and Mules*			904	90,072	
Cattle*			2,627	123,994	
Hogs*			2,644	30,935	

TYRRELL COUNTY

In Northeast Coastal; population, 4,849; area, 249,600 acres; topography, low, swamps; waters, Alligator river; Albemarle sound; lakes, Phelps; railroads, N. So.; highways, No. 90; incorporated cities and towns, ‡Columbia.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	4	28	\$11,700	\$31,183	\$52,968	\$21,785

Lumber and Wood products chief industries of the county.

Forest Products.—The forest area is approximately 226,164 acres, comprising 90 per cent of the total land area. Only 9 per cent of the forest area is farm woodland; including some 1,998 acres of woodland pasture. The principal merchantable species are loblolly pine 75 per cent, gum 15 per cent, cypress and white cedar.

The estimated present stand of 95,000,000 board feet of saw timber is only partly accessible by water, roads and rail.

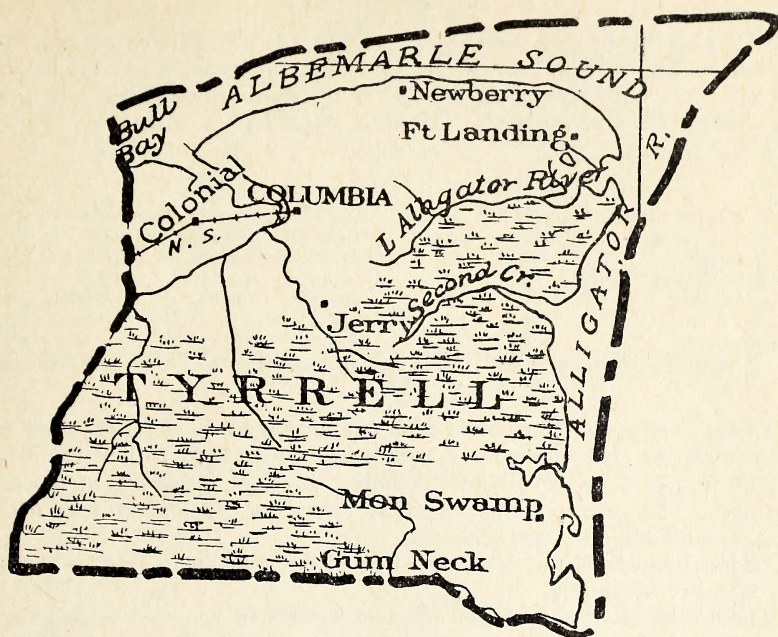
Nearly 75 per cent of the forest is swamp, owned largely by three large lumber companies. White cedar was formerly abundant, but this has nearly all been cut. Both pine and swamp lands have been heavily logged. Reproduction of both pine and cedar is excellent on unburned areas.

Two small sawmills produce about 500,000 board feet of lumber per annum. In addition 3,500,000 feet of logs go out by water. A small quantity of staves are also cut. The estimated stumpage value of the timber cut annually will hardly exceed \$20,000.

Water Products.—This county is located in the northeastern section of the state and its chief water products are those from the fresh water areas of Albemarle sound. Shad, herring and other fresh water fish make up a great part of the commerce of this county. The food fish catch in 1927 was 299,668 pounds, valued at \$17,134.

Water Resources and Power.—Waters: Scuppernong, Alligator, Northwest Fork Alligator, and Southwest Fork rivers; Alligator, Second, and Rider's creeks; Phelps lake (part), and Albemarle sound. Water: Cisterns chief source of supply, with shallow wells only other source. Power: Power obtainable through individual provision.

Agricultural Products.—This county has been developed in trucking, the Irish potato crop being important, with 667 cars shipped during 1927, and an appreciable area of peas and other truck crops produced. The principal farming region is along the northern border, while important open areas are worked at three or four other parts of the county. The main body of the county rises very little above the sea level with timber and swamp areas predominating. About 6 per cent of the land area is in cultivation. This county sold and slaughtered 11,551 head of hogs in 1927.



County Products	19,474 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	8,871	25	221,775	\$177,420	\$ 20.00
Soy Beans	4,838	17	82,246	102,808	21.25
Irish Potatoes	2,422	139	336,658	471,321	195.00
Peanuts	874	950	830,300	37,364	42.75
Hay (Including Meadow)	1,387	1.0	1,409	32,407	23.00
Horses and Mules*			1,111	119,665	
Cattle*			1,033	48,758	
Hogs*			8,917	104,329	

UNION COUNTY

In South Piedmont; population, 37,900; area, 361,600 acres; topography, rolling, fertile; waters, Rocky river; railroads, S. A. L.; buslines, Queen City; highways, Nos. 20, 25, 151; incorporated cities and towns, Marshville, Mineral Springs, *†Monroe, Waxhaw.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	27	922	\$634,282	\$2,502,922	\$3,962,452	\$1,459,530
Food and Kindred Products	8	60	66,335	614,217	958,347	344,130
Forest Products	7	39	23,790	167,399	219,459	52,060
Textiles	5	659	354,532	1,379,776	2,106,128	726,352
*Miscellaneous	7	164	189,625	341,530	678,518	336,988

*Includes Printing and Publishing, Railroad Repair Shops, Fertilizer, Cotton Seed Products, etc.

Forest Products.—The forest area is approximately 157,375 acres, comprising 43 per cent of the total land area. More than 76 per cent of the forest area is farm woodland; including some 23,508 acres of woodland pasture. The principal merchantable species are shortleaf pine 75 per cent, oak 20 per cent, and hickory.

The estimated present total stand of 95,000,000 board feet of saw timber is fairly accessible.

About half the forest is the original hardwood common to the region, heavily and frequently cut over. The rest is second growth pine or abandoned farm lands. In the southeastern corner is the furthest west of longleaf pine in the state.

Some 50 sawmills produce about 20,000,000 board feet of lumber per annum. A considerable quantity of ties are also cut. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—Gold, lead and zinc ores have been found in the extreme western part of the country. The old Howie gold mine near Waxhaw is being operated on a small scale at the present time. The lowlands southwest of the depot at Monroe are underlaid by an abundance of blue clay, about 6 feet thick, which makes a fair type of brick. Shale similar to that of Stanly county occurs at several locations in the county. Mineral production in the county in 1926 was \$179,775.

Water Resources and Power.—Waters: Rocky river; Goose, Crooked, Richardson, Stewart, West Fork Twelve Mile, East Fork Twelve Mile, and Lanes creeks. Water: Surface sources of supply, abundant; chemical quality, excellent; physical quality, excellent with exception moderately high turbidities. Underground supplies meet individual needs outside of developed communities. Power: Two high voltage transmission circuits of Duke Power cross the county, via Monroe, which are capable of meeting any demands for electric power.

Agricultural Products.—The best grade of cotton staple in North Carolina is grown in Union county, where 34,899 bales were ginned last year. This county produces more oats than any other in the state. These are grown primarily in the northern portion where a stiff soil predominates,



but there is also a good diversity of crops produced. About one-half of the county is in cultivation with 52 per cent of the cultivated land devoted to cotton. It reported 309 active tractors and 6,656 dairy cows, while over 100,000 hens were the basis of their poultry products in 1927. The land was tilled about equally between tenants and owners.

County Products	136,446 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	71,189	213	31,722	\$3,229,774	\$45.37
Corn	41,410	20	828,200	803,354	19.40
Oats	13,922	17	236,674	182,239	13.09
Wheat	8,560	11	94,160	129,941	15.18
Hay (Including Meadow)	6,621	1.0	6,634	145,948	22.00
Horses and Mules*			8,356	938,716	
Cattle*			9,592	452,742	
Hogs*			6,510	76,167	

VANCE COUNTY

In Northeast Piedmont; population, 25,100; area, 178,560 acres; topography, rolling, fertile; waters, Tar river; railroads, Seaboard, Southern; bus-lines, Safety; highways, Nos. 50, 57, 501; incorporated cities and towns, *Henderson, Middleburg.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf
All Industries	20	1,839	\$1,091,891	\$5,062,911	\$7,461,980	\$2,399,069

*Textiles most important industry in the county, Fertilizer, and Lumber also produced.

Forest Products.—The forest area is approximately 116,923 acres, comprising 65 per cent of the total land area. More than 74 per cent of the forest area is farm woodlands; including some 9,924 acres of woodland pasture. The principal merchantable species are shortleaf and loblolly pine 85 per cent, oak 10 per cent, poplar, gum and hickory.

The estimated present total stand of 25,000,000 board feet of saw timber is fairly accessible.

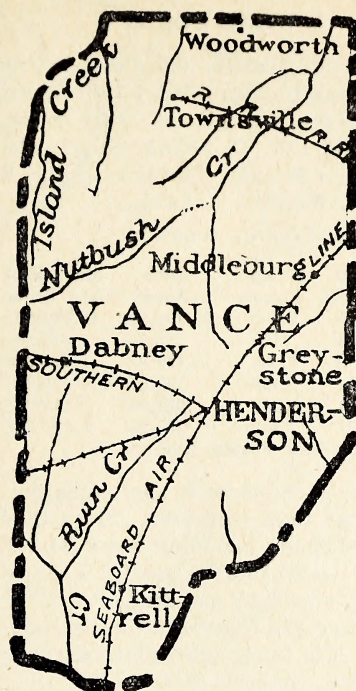
The hardwood forest is chiefly in the northern part. In the southern, more sandy portion second-growth pine, on abandoned farm land, is the rule. Loblolly is the most abundant pine here while further north shortleaf takes its place in ten old fields.

Some 20 sawmills are operating in the county producing about 15,000,000 board feet of lumber per annum. Little else is cut except a few veneer logs. The estimated stumpage value of the timber cut annually is \$65,000.

Mineral Products.—The granite of this county is one of the best known in the State and the area is a large one, confined principally to the central and eastern parts of the county. The principal quarries are located at Graystone, Middleburg and near Henderson. The chief use has been for street purposes in the form of blocks; for coping and bridges; and to some extent as a building stone. Mineral production in the county for 1926 was \$260,000.

Water Resources and Power.—Waters: Tar river; Island, Little Island, Nutbush, Tabbs, Rain, and Sandy creeks. Water: Sources of surface supply, numerous; chemical quality, considered excellent; physical quality, excellent except for moderately high turbidity and suspended matter prevailing in larger streams. Power: Transmission circuits of Carolina Power radiate from Henderson, and offer service in three sections, largely paralleling the railroads and assure ample power service in the county.

Agricultural Products.—With about one-fourth of its land area under cultivation, Vance County shows a varied agricultural program. Tobacco and corn are on a parity so far as acreage is concerned, but no crop is particularly outstanding in this county. We find here 97 active tractors, about 9,000 tons of commercial fertilizers were used, 2,200 milch cows, 36,000 hens; 3,000 hogs disposed of during 1927 and about 1,000 acres in home gardens, were reported.



County Products	42,365 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Tobacco	14,320	710	10,167,200	\$2,440,128	\$170.00
Corn	14,287	20	285,740	300,027	21.00
Cotton	8,228	246	4,234	406,842	49.45
Wheat	996	11	10,956	15,886	15.95
Hay (Including Meadow)	1,716	.9	1,558	34,276	19.80
Horses and Mules*			3,270	343,434	
Cattle*			2,978	140,562	
Hogs*			4,135	48,380	

WAKE COUNTY

In East Central Piedmont, western edge Coastal; population 83,100; area 527,360 acres; topography, rolling, fertile; waters, Neuse river; railroads, A. C. L., Seaboard, Southern, Norfolk So., Durham So.; buslines, Carolina, Safety; highways, Nos. 10, 10B, 21, 50, 55, 90, 91, 210; incorporated cities and towns, Apex, Cary, Fuquay Springs, Holly Springs, Morrisville, *†Raleigh, Wake Forest, Wendell, Zebulon.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	69	2,503	\$2,404,681	\$5,439,301	\$10,566,025	\$5,126,724
Food and Kindred Products	15	150	182,331	652,889	1,323,822	670,933
Textiles	8	1,095	739,875	1,815,639	2,871,592	1,055,953
Forest Products	11	162	130,018	251,048	519,564	268,516
Printing and Publishing	14	251	379,223	458,361	1,700,121	1,241,760
*Miscellaneous Industries	21	845	973,234	2,261,364	4,150,926	1,889,562

*Includes Paving material, Dental goods, Foundry products, etc.

Forest Products.—The forest area is approximately 344,483 acres, comprising 65 per cent of the total land area. More than 61 per cent of the forest area is farm woodland; including some 34,356 acres of woodland pasture. The principal merchantable species are old field 70 per cent, yellow pine 15 per cent, mixed 15 per cent.

It is estimated that there still remains a total stand of 140,000,000 board feet of saw timber which is fairly accessible by roads and rail.

The hardwood and pine, comprising about 25 per cent of the total, is chiefly confined to the northwest section. The Coastal Plain region extends into the N. E. and S. E. corners of the county and on this loblolly pine has replaced the original longleaf growth.

Some 20 sawmills produce about 30,000,000 board feet of lumber per annum. Some ties and veneer logs are also cut. The estimated stumpage value of the timber cut annually is around \$150,000.

Mineral Products.—Much clay of very plastic nature underlies the bottom lands north and east of the city of Raleigh. West of Cary is a belt of clays and shales which are suitable for brick making. In the vicinity of Raleigh there are many exposures of granite which is suitable for the building trade. A light yellowish-green serpentine occurs along Barton creek, 15 miles northwest of Raleigh, which is suitable for building stone. Mineral production in the county for 1926 was \$255,500.

Water Resources and Power.—Neuse and Little rivers; Richland, Moccasin, Buffalo, Horse, Lower Barton, Upper Barton, Crabtree, Walnut, Swift, Middle, and Whiteoak creeks; Water: Sources of surface supply numerous, capable of being largely developed, chemical qualities, excellent for domestic and industrial requirements; physical characteristics, generally excellent; few streams receive industrial or domestic wastes; turbidities, at times of storm flow, usually necessitate sedimentation or filtration. Well waters used for domestic or school supplies, excellent, where demands are small. Power: Ample, all sections of county, by Carolina Power transmission lines or lines can be quickly extended whenever required. A 3,300 h. p. steam plant serves the load center at Raleigh. Any desired amount



(This map is slightly reduced in size)

of power can be made available in Wake county from other steam and hydro plants of the company, which are tied into the interconnected system.

Agricultural Products.—This is one of the largest counties in total, as well as cultivated area, with a relatively poor soil and preponderance of tenanted acres. The State Agricultural College and Experiment Stations and State prison farms are located in this county. The two cash crops, cotton and tobacco, have quite a hold which tends to displace many of the food and feed crops as conspicuous in the rest of the Piedmont counties, on its west. Apples and peaches have both been proven to be high in quality and productiveness here. This county forms the division of the Coastal Plain and Piedmont Area, which indicates a variety of soils.

County Products	168,390 Acreage	Yield Per Acre	Production *or Number	Value	
				Total	Per Acre
Cotton	53,219	231	25,719	\$2,434,131	\$45.74
Corn	49,025	21	1,029,525	1,060,411	21.63
Tobacco	30,685	685	21,019,225	4,834,422	158.00
Cow Peas	1,783	13	23,179	40,563	22.75
Hay (Including Meadow)	3,136	1.3	3,986	91,678	29.90
Horses and Mules*			8,297	924,303	
Cattle*			7,607	359,050	
Hogs*			11,115	130,046	

WARREN COUNTY

In Northeast Piedmont; population, 22,500; area, 272,000 acres; topography, rolling, fertile; waters, Roanoke river; railroads, Seaboard; bus-lines, Safety; highways, Nos. 43, 48, 50, 58; incorporated cities and towns, Macon, ‡Warrenton.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added By Manuf.
All Industries	20	270	\$148,476	\$493,800	\$846,260	\$352,460
Lumber, Fertilizer, Textiles, most important products.						

Forest Products.—The forest area is approximately 169,235 acres, comprising 63 per cent of the total land area. More than 56 per cent of the forest area is farm woodland; including some 19,268 acres of woodland pasture. The principal merchantable species are loblolly and shortleaf pine 80 per cent, oak 10 per cent, poplar, hickory and gum.

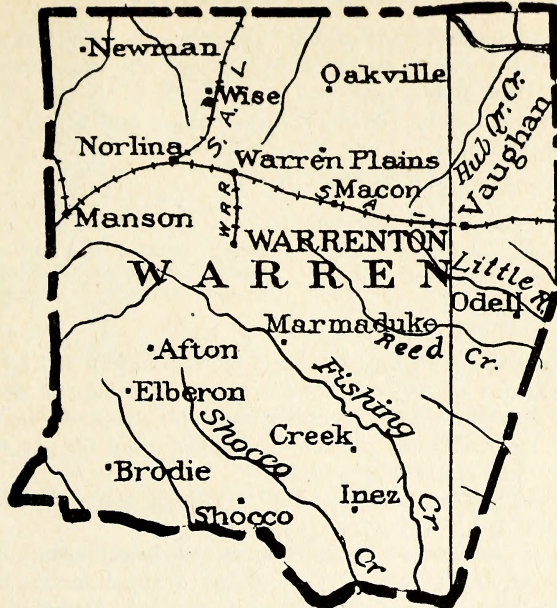
The estimated present total stand of 55,000,000 board feet of saw timber is fairly accessible.

Eight per cent of the forest is old field pine type on land formerly cultivated. Most of this, as well as the hardwood, has been heavily cut. Shortleaf is the common pine in the western part while loblolly predominates in the south and east. Longleaf pine occurs among the hardwoods near the southeastern corner.

Some 30 sawmills produce about 15,000,000 board feet of lumber per annum. Some ties, veneer logs, and pulpwood are also cut. The estimated stumpage value of the timber cut annually is \$65,000.

Water Resources and Power.—Waters: Roanoke river; Smith, Fishing, Little Fishing, Reedy, Big Stone House, Shocco, Little Shocco, and other creeks. Water: Surface sources of supply are numerous; chemical and physical qualities considered fair; little specific information for classification. Power: Service from lines of Carolina Power which can be extended to meet needs.

Agricultural Products.—The natural soils in this county permit of good diversifications and high yields when cared for properly. Many of the old plantations have been taken over by tenants, while many former prosperous farm families became "land poor." It showed 5,853 hogs sold and slaughtered and 873 sows on farms last year. It used about 12,000 tons of fertilizers. About one-third of the total area is in cultivation.



County Products	80,669 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	25,317	19	481,023	\$ 505,074	\$ 19.95
Cotton	31,186	262	17,094	1,609,634	51.61
Tobacco	7,928	670	5,311,760	1,168,587	147.00
Cow Peas	3,408	11	37,488	67,478	19.80
Hay (Including Meadow)	2,436	.7	1,798	42,703	16.63
Horses and Mules*			4,446	468,370	
Cattle*			5,051	238,407	
Hogs*			6,103	71,405	

WASHINGTON COUNTY

In Northeast Coastal; population, 11,700; area, 209,280 acres; topography, low, sandy, fertile black lands; waters, Roanoke river, Albemarle sound; lakes, Phelps, Wenona; railroads, A. C. L., N. So.; buslines, Babcock; highways, Nos. 90, 97; incorporated cities and towns, Cherry, Creswell, ‡Plymouth, Roper.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	5	311	\$268,864	\$403,261	\$841,051	\$437,790

Forest Products.—The forest area is approximately 171,587 acres, comprising 81 per cent of the total land area. More than 20 per cent of the forest area is farm woodland; including some 743 acres of woodland pasture. The principal merchantable species are loblolly pine 65 per cent, gum 25 per cent, oak, poplar, ash and cypress.

The estimated present total stand of 80,000,000 board feet of saw timber is fairly accessible by water, roads and rail.

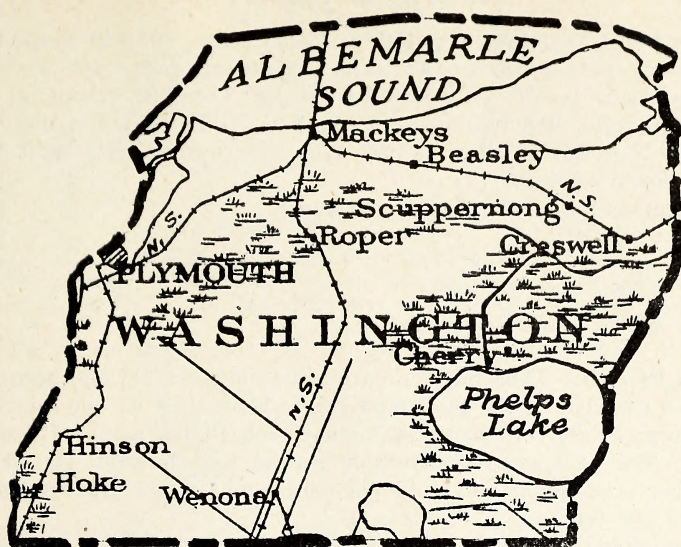
Swamp lands constitute 65 per cent of the forest area. Loblolly pine grown chiefly on the higher areas and the drained lands, such as those near Lake Phelps. Much of the swamp is sparsely timbered with Savana or pocosin pine.

Some 15 sawmills produce about 30,000,000 board feet of lumber per annum, only half of which has grown within the county. A considerable quantity of logs are also cut and manufactured. The estimated stumpage value of the timber cut annually is around \$75,000.

Water Products.—Washington county leads the state in herring production, which in 1927 was 1,197,250 pounds. This county is on the southern shores of Albemarle sound and in addition to its herring output it ranks high in production of shad, perch, rock and other fresh water fish. In 1927 food fish output was 1,232,357 pounds valued at \$38,310.

Water Resources and Power.—Waters: Roanoke and Scuppernong, rivers; Welsh and Hendrick's creeks; Phelps and Pungo lakes; Water: Underground supplies are used chiefly. Deep wells and numerous shallow wells are used principally for individual supplies. Power: Plymouth has a 100 h. p. electric plant to care for local needs.

Agricultural Products.—In the farming area in the northern portion of this county, near Albemarle sound, 306 carloads of truck crops were shipped last year, including 117 cars of peas and 185 of Irish potatoes. This is also quite a corn country, with some peanuts grown in the western portion and soy beans in the northern and eastern areas. The southern portion of the county is made up mostly of cut-over sandy, and wooded lands.



County Products	31,731 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	13,291	27	358,857	\$358,857	\$27.00
Peanuts	6,890	635	6,442,150	322,108	46.75
Soy Beans	4,147	15	62,205	77,756	17.75
Cotton	1,850	245	948	90,650	49.00
Hay (Including Meadow)	3,446	.7	2,477	54,494	15.40
Horses and Mules*			6,758	201,612	
Cattle*			3,088	145,754	
Hogs*			26,416	309,067	

WATAUGA COUNTY

In Northwest Mountain; population, 13,477; area, 193,920 acres; topography, high, mountains, fertile; waters, Watauga and South Fork New river; railroad, Linville R.; buslines, Miller Transfer Company, Bumgarner and Stout, Lenoir-Blowing Rock, A. A. Gilliam, Hayter and Clark; highways, Nos. 16, 17, 60, 68, 69, 175; incorporated cities and towns, Blowing Rock, ‡Boone.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	8	62	\$30,278	\$17,259	\$83,687	\$66,428
Lumber and Wood products chief industries.						

Forest Products.—The forest area is approximately 107,453 acres, comprising 56 per cent of the total land area. More than 68 per cent of the forest area is farm woodland, including some 13,650 acres of woodland pasture. The principal merchantable species are chestnut 42 per cent, oak 23 per cent, sugar maple 15 per cent, pine 10 per cent, poplar and others 10 per cent.

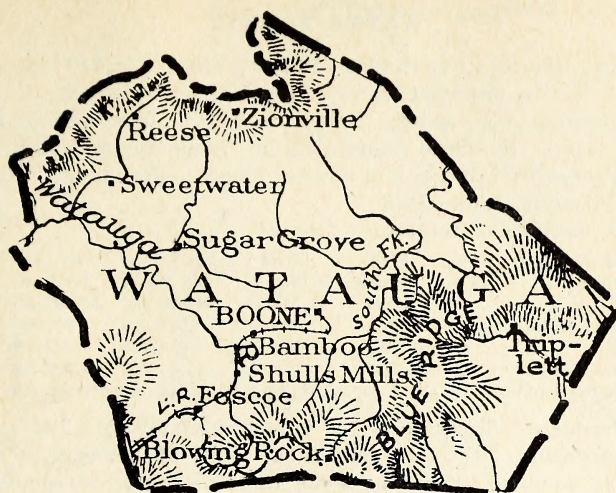
The estimated present total stand of 118,223,660 board feet of saw timber is fairly accessible.

Only one or two tracts of virgin timber are now left. Second growth white pine is coming in abundantly along the Blue Ridge now that fires are being controlled.

Some 12 sawmills produce about 7,500,000 board feet of lumber per annum. A considerable quantity of chestnut extract, pulpwood and ties are also produced. The estimated stumpage value of the timber cut annually is around \$40,000.

Water Resources and Power.—Waters: Watauga and South Fork New rivers; Beaver, Cave, Brushy Fork, Howard, Meat Camp, Elk, Laurel, Beech and other creeks. Water: Chemical and physical qualities, high excellence, found only in high mountain areas untroubled by pollution. Power: 300 hydro-electric power developed on South Fork New river at Boone; 380 horsepower at Shulls Mill on the Watauga river, used by Blowing Rock with a small plant in Valle Crucis, 6,500 of undeveloped hydro-electric horsepower estimated on the Watauga river, and 1,250 on the South Fork New river.

Agricultural Products.—A county known for its livestock area and as the most important cheese producing county in the south. Its fine grasses and pasture, cool high altitude, pure water and well-bred livestock peculiarly fits it for this high-grade product; 5,500 sheep ewes, 3,700 milch cows and about 500 brood sows and over 55,000 hens are reported. One hundred fourteen thousand five hundred ninety-two fruit trees with 103,000 bushels of apples were reported in 1925. Buckwheat is one of the important crops, while hay occupies 50 per cent of the cultivated area and corn 30 per cent. Oats and rye are important. We find few tenant farmers in this territory and the soils do not require commercial fertilizers. it had 16 silos in 1925, and 15 per cent of the land is cultivated.



County Products	21,562 Acreage	Yield Per Acre	Production or *Number	Values Total	Value Per Acre
Corn (For grain)	8,499	23	195,477	\$201,341	\$ 23.69
Oats	3,085	14	43,190	31,097	10.08
Rye	2,505	11	27,555	35,270	14.08
Irish Potatoes	1,510	111	167,610	251,415	167.00
Hay (Including Meadow)	9,606	.9	8,576	214,400	22.50
Horses and Mules*			2,100	192,596	
Cattle*			7,414	349,941	
Hogs*			3,321		
Sheep*			8,160	95,472	
Fruit	114,592 Trees		102,756 Bu.		

WAYNE COUNTY

In Central Coastal; population, 49,000; area, 365,440 acres; topography, low, fertile, swamps; waters: Neuse river; railroads, A. C. L., N. So., Southern; business, Safety, Goldsboro-Wilson, Southerland Bros., Allen Moses, (col.), Seashore Transportation Company; highways, Nos. 10, 40, 102; incorporated cities and towns, Eureka, Freemont, *Goldsboro, Mt. Olive, Pikeville, White Hall.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	44	1,994	\$1,532,711	\$4,606,446	\$7,897,469	\$3,291,023
Food and Kindred products	11	69	65,887	538,519	802,838	264,319
Forest Products	13	995	877,315	1,653,858	3,192,289	1,538,431
*Miscellaneous Industries	20	930	589,509	2,414,069	3,902,342	1,488,273

*Includes, Cotton Seed products, Fertilizer, Printing and Publishing, Mattresses, etc.

Forest Products.—The forest area is approximately 215,264 acres, comprising 59 per cent of the total land area. Only 38 per cent of the forest area is farm woodland, including some 13,449 acres of woodland pasture. The principal merchantable species are pine 60 per cent, black gum 15 per cent, sweet gum 15 per cent.

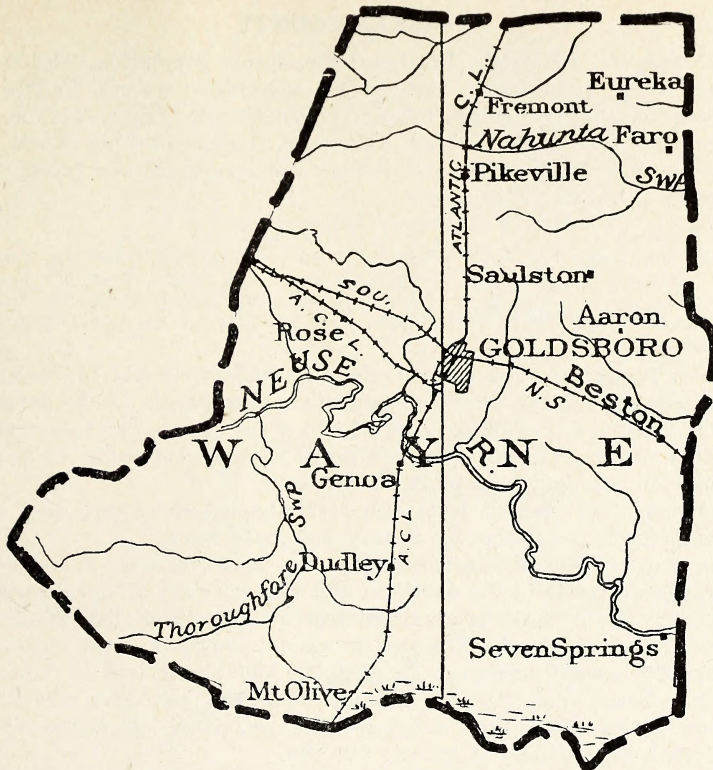
The estimated present total stand of 110,000,000 board feet of saw timber is fairly accessible over county roads and by rail.

A large proportion of the timber manufactured by the big sawmills is grown and cut by the farmers and delivered by them to the mills on truck and wagon. South of Neuse river are extensive pine barrens now denuded. The loblolly pine growth have mostly been cut.

Some 25 sawmills produce about 50,000,000 board feet of lumber per annum only about 20,000,000 board feet of which is grown within the county. Some five million board feet of veneer logs are also produced. The estimated stumpage value of the timber cut annually is around \$100,000.

Mineral Products.—Near Goldsboro there are extensive beds of sedimentary clays underlying the lowlands southeast of the town. The exact depth of the clay is not known. About one and one-half miles southwest of Goldsboro there is a very plastic clay which occurs in a bed eight feet thick which is suitable for brick manufacture. The best marls of this county occur near Mount Olive and have a thickness of 20 to 25 feet. Analyses show from 40 per cent to 80 per cent calcium carbonate. Total value of the mineral production in the county for 1926 was \$461,625.

Water Resources and Power.—Waters: Neuse, Little, and Northeast Cape Fear rivers; Nahunta, Bear, Stony, Walnut, Thoroughfare Swamp, and Beaverdam creeks. Water: The surface sources of supply capable of being largely developed, and in general characteristics, combine the qualities of both the Piedmont and Coastal Plain waters. They are considered excellent in both chemical and physical characteristics. Prevailing turbidities and color require filtration or other treatment where requirements of a high order are to be met. Shallow wells are used to supply small domestic needs, the waters obtained are practically all considered excellent, although in certain areas, iron content is a little high. The water obtained from deep wells is of an inferior quality. Mineral springs have been developed into commercial assets. Power: Carolina Power



maintains a 1,600 h. p. steam plant at Goldsboro, with transmission lines radiating in four directions, roughly parallel to the four railway lines. No hydro-electric developments or sites of any large size are available.

Agricultural Products.—In the region of Mount Olive we find an intensive trucking area, and this county shipped, during 1927, 533 cars of Irish potatoes, 164 of cucumbers, 36 of string beans, 25 of strawberries, 37 of watermelons and 25 of other vegetables. The soil is of a Norfolk, sandy loam type, of a slightly rolling nature which responds nicely to soil improvement methods and is easily worked. About one-third of the area is in cultivation. In 1927, 131 tractors and 3,533 tenants were found on farms which used 31,000 tons of commercial fertilizers. Many of its acres grow two or three crops during the same year. The county ginned 25,895 bales of cotton during 1927. It disposed of 12,200 head of hogs, and reported 100,000 hens.

County Products	139,118 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	53,008	23	1,219,184	\$1,146,033	\$21.62
Cotton	54,699	232	26,548	2,512,653	45.94
Tobacco	22,083	744	16,429,752	3,614,545	164.00
Oats	4,759	17	80,903	72,813	15.30
Hay (Including Meadow)	5,492	.7	4,074	85,554	14.70
Horses and Mules*			8,113	911,911	
Cattle*			3,504	165,389	
Hogs*			22,286	260,746	

WILKES COUNTY

In Northwest Piedmont, Northeast Mountain; population, 34,200; area, 470,400 acres; topography, high plains, mountains; waters, Yadkin river; railroad, Southern; buslines, Camel City, Woodie Transfer Line, Bumgarner and Stout, Call Motor Company, Lenoir-Blowing Rock Lines; highways, Nos. 16, 18, 26, 60, 67, 68; incorporated cities and towns, *North Wilkesboro, Ronda, ‡Wilkesboro.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	40	1,248	\$785,909	\$3,827,669	\$5,981,178	\$2,153,509

Furniture and Saw mill products, Foundry work, Textile products, are the chief industries in this county.

Forest Products.—The forest area is approximately 314,741 acres, comprising 67 per cent of the total land area. Two-thirds of the forest area is farm woodland, including some 23,000 acres of woodland pasture. The principal merchantable species are pines 25 per cent, oaks 50 per cent, chestnut 10 per cent, and poplar 5 per cent.

The estimated present total stand of 400,000,000 board feet of saw timber is fairly accessible by county and state roads.

The greater part of the forest area has been cut over for some time. Several large tracts in the northern and western part of the county, however, still retain their original growth of mountains hardwoods. The increased proportion of white pine in second growth is most encouraging.

Some 30 sawmills produce about 6,000,000 board feet of lumber per annum. Large quantities of extract wood and tan bark are also cut and marketed within the county. The estimated stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—The valley of the Yadkin river at Wilkesboro is three-quarters of a mile wide, and is underlaid by an abundance of clay suitable for brick. At Wilkesboro good pottery clays are found. Kaolin clays of fair grade occur along Reddies river and along the banks of the same river graphic granite occurs at a number of places. Numerous closely grouped large residuals of granite occur along the boundary between Wilkes and Alleghany counties. Stone Mountain, an oval shaped mass, 500 to 600 feet high is the largest exposure of granite in the state. One of the most favorable exposures of serpentine occurs on Reddies river northwest of North Wilkesboro. Crysolite asbestos is found with the serpentine and kyanite occurs along the crest of the Blue Ridge in the western part of the country. The mineral production in the county for 1926 was \$23,275.

Water Resources and Power.—Waters: Yadkin, Reddies, Roaring, Elkin, Mulberry, Little Elkin, Middle Prong Roaring, East Prong Roaring, North Prong Roaring, North Fork Reddies, Middle Fork Reddies, South Fork Reddies rivers; Big Bugaboo, Little Bugaboo, North Prong Lewis Fork, Lewis Fork, Stony Fork, Elk, Beaver, Warrior, Moravian, Hunting, Fishing, and Little Hunting creeks. Water: Surface supplies, capable of furnishing large needs and of the mountain type, are numerous; chemical qualities excellent; physical qualities, satisfactory, with moderately high turbidities in the larger streams. Power: Duke Power, one line par-



alleys railway eastward from North Wilkesboro to Elkin and another extends southward into Alexander county. The same company controls hydro-electric plants of 65 h. p. at Moravian Falls, 240 h. p. at Carter's Falls, and 400 h. p. at North Wilkesboro. Roughly 14,000 hydro-electric horsepower remains to be developed on the larger streams.

Agricultural Products.—This county has naturally good soils, bordered on the northwest by the Blue Ridge mountains and with the Yadkin river flowing through it. With buckwheat on its west to tobacco, cotton and peaches in the south, there are possibilities of great diversification. Live-stock conditions here are favorable and about 7,000 milch cows, 600 sows and 95,000 laying hens, were reported in 1927. With 97,000 peach trees of bearing age, 570 acres of field vegetables and 1,784 acres of home gardens reported in 1927. Considerable dried apples are produced and shipped from this county.

County Products	82,050 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn (For grain)	37,735	21	792,435	\$776,586	\$20.58
Wheat	14,783	10	147,830	211,397	14.30
Rye	7,721	10	77,210	99,601	12.90
Cow Peas	2,100	11	23,100	37,191	17.71
Hay (Including Meadow)	4,040	1.1	4,339	104,136	26.40
Apples	320,051	Trees	402,638 Bu.	636,168	
Horses and Mules*			4,640	493,888	
Cattle*			10,245	483,564	
Hogs*			7,208	84,334	
Peaches	95,151	Trees	58,080 Bu.		

WILSON COUNTY

In Eastern Central Coastal; population, 42,500; area, 238,720 acres; topography, low, rolling, fertile; waters, Contentnea creek; railroads, A. C. L., N. So.; buslines, Nash Bus Line, Goldsboro-Wilson, Carolina; highways, Nos. 22, 40, 42, 91; incorporated cities and towns, Black Creek, Elm City, Lucama, Stantonsburg, *‡Wilson.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value Added by Manuf.
All Industries	16	555	\$455,676	\$2,709,781	\$3,918,461	\$1,208,680

Cotton Seed products, Fertilizer, Textiles most important industries in this county; tobacco redrying not included in "manufactures".

Forest Products.—The forest area is approximately 138,572 acres, comprising 58 per cent of the total land area. More than 54 per cent of the forest area is farm woodland, including some 3,426 acres of woodland pasture. The principal merchantable species are loblolly pine 75 per cent, shortleaf pine 20 per cent, oak and gum.

The estimated present total stand of 30,000,000 board feet of saw timber is readily accessible by roads and rail.

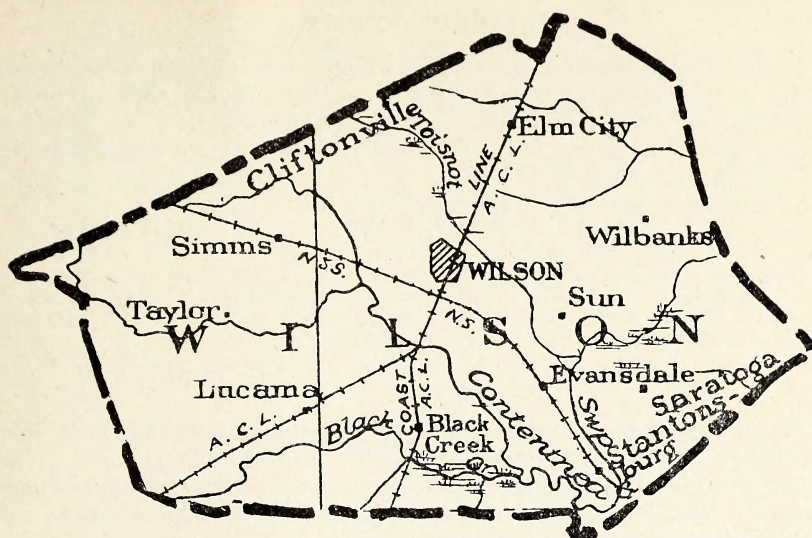
The original longleaf pine forests were replaced by loblolly and this in turn has been cut. Much is being cleared for agriculture. There is scarcely more than 5,000 acres of merchantable timber now available.

Five sawmills produce about 9,000,000 board feet of lumber per annum. There is practically no other wood used except for fuel. The estimated stumpage value of the timber cut annually is around \$50,000.

Mineral Products.—Sedimentary clays suitable for brick making occur in considerable quantity on the east and northeastern edge of the town of Wilson. Two areas contain workable granites, three miles south of Wilson, and three miles north of Elm City. Shell marl has been dug at numerous places along Toisnot and Hominy creeks, and near Sharpsburg, as well as along White Oak swamp. Analyses show from 38 per cent to 72 per cent calcium carbonate. Mineral production of the county for 1926 was \$300,584.

Water Resources and Power.—Waters: Moccasin, Contentnea, Toisnot Swamp, Whiteoak Swamp, Toisnot, Town, Cattail Swamp, White Swamp, Blooming Swamp, Black, and other creeks. Water: Variable in quality over county, available information inadequate to allow classification, but many sources known to be entirely satisfactory. Power: Generally and adequate power is available over greater part of county from Carolina Power high voltage line found in northeast section and lower voltage lines of "rural power" class which radiate from 6,000 h. p. municipal steam plant in Wilson.

Agricultural Products.—Wilson ranks first of any tobacco market in the world, selling 67,875,000 pounds of the farmers' tobacco in 1927. About one-half of the county is in cultivation, with cotton ranking decidedly first in extent. Good farming methods are practiced and good results are obtained, although about 80 per cent of the crops are



grown by tenants, who employ 141 tractors. The extensive cotton and tobacco crops used 31,720 tons of commercial fertilizers in 1927. With good highways, railroad transportation and marketing facilities, this county offers favorable opportunities in farming.

County Products	105,564 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Cotton	38,057	266	21,178	\$2,024,632	\$ 53.20
Corn	29,686	22	653,092	666,154	22.44
Tobacco	29,478	738	21,754,764	5,221,143	177.00
Oats	3,346	20	66,920	52,198	15.60
Sweet Potatoes	1,303	125	162,875	131,929	101.00
Horses and Mules*			6,758	773,930	
Cattle*			3,088	145,754	
Hogs*			26,416	309,067	

YADKIN COUNTY

In Northwest Piedmont; population, 17,000; area, 207,360 acres; topography, east rolling, west mountainous; waters: Yadkin river; railroad, Southern; buslines, Elkin and Alleghany, Camel City, C. A. Shugart; highways, Nos. 26, 60, 80; incorporated cities and towns, Booneville, East Bend, Jonesville, ‡Yadkinville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	12	52	\$32,018	\$184,835	\$291,479	\$106,644
Food and Kindred Products	4	7	4,817	132,622	162,174	29,552
Forest Products	8	45	28,201	52,213	129,305	77,092

Forest Products.—The forest area is approximately 97,128 acres, comprising 47 per cent of the total land area. More than 95 per cent of the forest area is farm woodland, including some 7,540 acres of woodland pasture. The principal merchantable species are pine 60 per cent, oak 25 per cent and poplar 5 per cent.

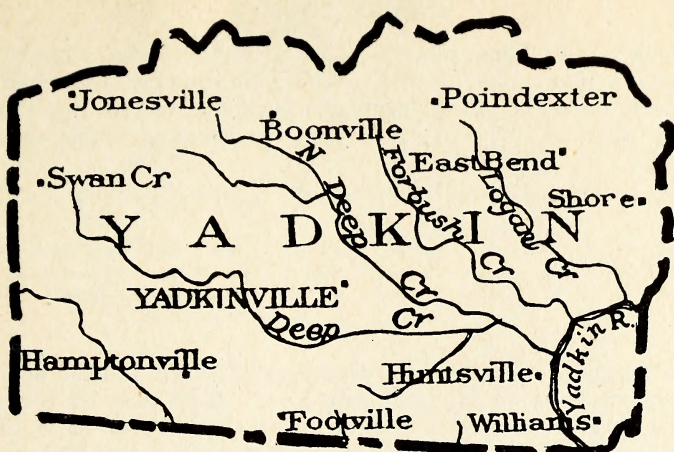
The estimated present total stand of 30,000,000 board feet of saw timber is fairly accessible.

Much of the forest is second growth pine come in on land which was once cleared and cultivated, but which was subsequently abandoned.

Some 20 sawmills produce about 2,000,000 board feet of lumber per annum. The estimated stumpage value of the timber cut annually exceeds \$10,000.

Water Resources and Power.—Waters: Yadkin river; North Hunting, Deep, South Deep, North Deep, Forbush, and Logan creeks. Water: Surface generally available over county; chemical and physical qualities show characteristics of mountain and western Piedmont waters; chemical qualities excellent, physical qualities excellent, except for moderately high turbidities prevailing concurrently with storm flows. Power: A high voltage transmission line of Duke Power crosses county along its northern border. It is estimated that 12,000 horsepower of hydro-electric power can be developed on the Yadkin river, near Bean Shoals and Surry County.

Agricultural Products.—The most important crop is corn, followed by 24 per cent of its cultivated area being in wheat, 13 per cent or more in tobacco and about 14 per cent in cultivated hays. Rye is important in this county. Sixty three thousand hens, 457 sows, with 4,020 hogs sold or slaughtered, are shown in 1927. One hundred fifteen tractors were reported in 1927. Fruit is fairly important although not produced on a commercial scale.



County Products	61,632 Acreage	Yield Per Acre	Production or *Number	Value Total	Value Per Acre
Corn	20,860	23	479,780	\$ 479,780	\$ 23.00
Tobacco	9,679	645	6,242,955	1,373,450	142.00
Wheat	14,948	10	149,480	224,220	15.00
Rye	2,662	10	26,620	36,736	13.80
Hay (Including Meadow)	4,874	1.3	6,418	156,150	31.63
Horses and Mules*			3,317	361,571	
Cattle*			4,089	193,001	
Hogs*			4,195	49,082	

YANCEY COUNTY

In North Central Mountain; population, 17,100; area, 190,720 acres; topography, mountainous, fertile; waters, Nolichucky, Toe, South Toe, Cane rivers; railroads, Black Mountain; buslines, Higgins Bus Company; highways, Nos. 19, 69, 104, 197, 692; incorporated cities and towns, ‡Burnsville.

Industrial statistics of the county follow:

Manufacturing Industries	No. Estab.	Wage Earners	Total Wages	Mat'l, Fuel and Power	Total Value Products	Value added by Manuf.
All Industries	11	101	\$47,987	\$123,604	\$249,662	\$126,058

Forest Products.—The forest area is approximately 123,594 acres, comprising 65 per cent of the total land area. More than 72 per cent of the forest area is farm woodland, including some 25,000 acres of woodland pasture. Of the forest land outside of farms some 90 per cent is held in large timber tracts. The principal merchantable species are chestnut 40 per cent, oaks 25 per cent, poplar 5 per cent.

The estimated present total stand of 140,000,000 board feet of saw timber is fairly accessible by roads or rail.

The forest area includes a considerable area of cut-over and burned-over spruce land much of which will probably need to be planted.

Some 25 to 30 sawmills produce about 10,000,000 board feet of lumber per annum. A considerable quantity of pulpwood and extract wood is also produced each year. The estimated stumpage value of the timber cut annually is around \$70,000.

Mineral Products.—The chief minerals produced in this county are mica, feldspar and kaolin. Asbestos occurs on the southside of Green Mountain and near Micaville. Many of the gem stones as aquamarine, garnet, amethyst, etc., have been found associated with the feldspars of this county. Titaniferous magnetite occurs nine miles west of Burnsville. A good deposit of chromite occurs at Mine Hill near Burnsville. On the north end of the Black mountain large deposits of kyanite schist occur carrying from 15 per cent to 40 per cent kyanite. Near Lundy along the North Toe river, kaolin clay occurs. In a belt several miles wide crossing the central part of the county mica and feldspar occur in large quantities. Some of the most important producing mines of the state are found in this county.

The total value of the mineral production in this county for 1926 was \$198,961.

Water Resources and Power.—Waters: Nolichucky, North Toe, South Toe, and Cane rivers; Crabtree, Little Crabtree, Jacks, and other creeks. Water: Uniformly of excellent chemical and physical quality of mountain streams. High voltage line of the Carolina Power crosses the center of the county in an east-west direction. On the Nolichucky river, it is estimated that 48,900 hydro-electric horsepower can be developed from three sites which have been investigated, and on the Cane river, estimates give 1,850 horsepower.



Agricultural Products.—Almost one-fourth of this county is in cultivation. Its valleys are fertile and usually well cultivated. One-third of its plowed land is in hay crops and 44 per cent in corn. This is a good apple producing territory. Some buckwheat is grown here, and a total of over 126,000 fruit trees of bearing age are reported. The sheep industry is active with 3,226 ewe sheep.

County Products	32,905	Yield	Production or *Number	Value	Value
	Acreage	Per Acre		Total	Per Acre
Corn	12,077	25	301,925	\$301,925	\$25.00
Oats	5,227	17	88,859	61,313	11.73
Wheat	3,774	10	37,740	52,836	14.00
Irish Potatoes	781	85	66,385	71,696	92.00
Hay (Including Meadow)	8,302	.7	6,102	151,025	17.33
Horses and Mules*			2,455	251,761	
Cattle*			5,936	280,179	
Hogs*			3,301	38,622	

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ACKNOWLEDGMENT

For valuable data and statistics, acknowledgement is made to the following State Departments of North Carolina:

Department of Agriculture
Corporation Commission
Highway Commission
Department of Revenue
Tax Commission, and
The United States Department of Commerce,
Bureau of the Census, and
The Bureau of Foreign and Domestic Commerce, and

To the various Institutions, Colleges and Chambers of Commerce
of North Carolina, and

To the heads of each Division of the Department of Conservation and
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WADE H. PHILLIPS, Director.

Raleigh, N. C., December 31. 1928.

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